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Address communications to Jacksonville, Fla.

Life is not mere living, but the enjoyment of health.—Martial.

Vital Statistics

Pages 18, 19, 20

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1914

New Year's greetings to all Floridians and especially to the readers of the NOTES, as well as those interested in State-wide sanitation. To those wherever dispersed, throughout the world, who labor for the up-building of mankind, whether physically, mentally or morally, a Happy New Year.

As Floridians we have much to congratulate ourselves upon accomplishing in health work during the past year. No outbreaks of disease that were not speedily controlled by rational methods, no scares, no panicky feelings, no hysteria over fancied danger.

We are thankful for the confidence which the people of Florida place in their Health organization. They allow the State Board of Health to attend to the business which the State imposes upon them, and the supervision which is placed in their hands to execute, and having this confidence the people attend to their own particular business, and thus have made the State healthier and wealthier. There has been less malaria and less typhoid fever in the State than for several previous years, and to the intelligence of the citizens of Florida must this gratifying result be attributed. Therefore, with a gratitude that is heartfelt for such service, the NOTES sincerely wishes each and every reader a

Happy New Year



A FEW WORDS ABOUT SCARLET FEVER FOR THE LAYMAN.

Scarlet fever is a communicable disease characterized by a sudden onset and the appearance on the second or third day of a rash ranging in color from scarlet to dusky red.

It is principally a disease of childhood, but attacks grown people as well. One attack is the rule, but it should be remembered that a person *can* have scarlet fever the second time. It is most common between the ages of one and fifteen years.

DIAGNOSIS.

To decide whether or not your child has scarlet fever, you should consider:

1. Is there any scarlet fever in your neighborhood? Has the child been away from home where exposure is likely?
2. Was he taken ill suddenly two or three days before the appearance of the rash, or breaking-out, with high fever, possibly vomiting, bad headache, backache, and sore throat? Did the rash begin on the face and neck and extend from there over the abdomen and body?

TREATMENT.

The treatment of scarlet fever is largely symptomatic. By "symptomatic" is meant each case must be studied and treated separately; that there is no *rule* for its treatment. Therefore, the services of a doctor are indispensable. Do not try to treat scarlet fever yourself, no matter how light the attack, as the sequellae (by that term is meant the conditions which follow scarlet fever) can be very serious indeed, and the only way to avoid them is the proper care and attention during the attack. Diet during and for two or three weeks after the attack plays a very important part in the successful treatment of scarlet fever, and should be directed by a physician.

WHO CAN HAVE SCARLET FEVER?

Every one is liable to have scarlet fever. While it is true that a majority of cases occur in children, grown people *can* have it, and the consequences are just as bad if not worse. Do not think that *you* can't have it. You may have been exposed several times without taking it, but the next exposure may result in a bad case. There are numerous instances of nurses being exposed time after time finally taking it during a new outbreak. Good health and outdoor life are the best preventives.

THE SICK ROOM AND DISINFECTION.

As soon as the diagnosis of scarlet fever is made, the patient should be removed, if not too sick, to a room especially prepared. This room should be as far from the other members of the family as possible, on the top floor of the dwelling is preferable, and should have an abundance of fresh air and sunlight. All articles not needed by the patient or nurse, such as carpets, curtains, extra furniture, etc., should be removed. After being removed to the room selected, the room which

the patient originally occupied should be thoroughly disinfected, and the bed linen, etc., should be treated as directed further on in this article.

ISOLATION.

Isolation for a considerable period is the only method of preventing the spread of scarlet fever.

You may not see why your child, who is apparently well, should be isolated for six weeks, but you should remember that this is as much for the child's good, as for the protection of others.

You should also remember that, to use a common saying, it is "the lesser of two evils." If you should allow your child to go on the streets or back to school too early and in this way give scarlet fever to a half dozen other children, the community would not feel very kindly towards you—and their ill feeling would be justified.

DISINFECTION.

After dismissal by the doctor, and before the patient again mingles with other members of the family or well children, he or she should have an antiseptic bath, including the hair (your doctor will give instructions for properly giving this bath).

The room should be disinfected by washing the woodwork, furniture, floor, bedstead, etc., with a one- to two-thousand solution of bichloride of mercury or a ten-per-cent solution of carbolic acid. All articles that can be boiled should be boiled for at least thirty minutes. If your physician thinks it best, the room can then be disinfected with formaldehyde gas. After this disinfection, with formaldehyde, or if the room is not thus disinfected, after washing with the antiseptic solution, the windows and doors should be opened to their fullest capacity so as to allow as much sunshine and fresh air into the room as possible. If there is no necessity for occupying the room, it would be just as well not to do so for two or three weeks.

THINGS TO BE REMEMBERED.

1. Any one can have scarlet fever.
2. Good general health is the best preventive.
3. Close care and attention to diet, baths, etc., during the attack is the way to avoid complications.
4. The conditions which follow scarlet fever are organic heart trouble, Bright's disease, ear disease which results in deafness, and chronic throat trouble.
5. Scarlet fever is spread by discharges from the nose, upper air passage and ears. Therefore, clean white rags, which can be burned after using are best for cleansing these parts. If handkerchiefs are used, immerse for three hours in strong antiseptic solution before putting out to wash.
6. Animal pets should not be permitted in the room, or if permitted, should remain. Upon release, they should have the antiseptic bath, and should be forced to remain in the open air and sunshine for several hours before playing with well children.

7. The room of the patient should, by all means, be screened against flies and other insects. All flies remaining in the room should be killed as they can easily carry the infection to the remaining members of the family as well as to people living nearby.

J. E. T.

A FEW WORDS ABOUT DIPHTHERIA FOR THE LAYMAN.

Diphtheria is a communicable disease characterized by a membrane appearing on one or both tonsils or some other part of the throat. This membrane is a whitish-yellow in color, and can not be wiped off. The general symptoms are: fever, headache, backache, restlessness, sore throat, appearance of the membrane, and swelling of the glands of the neck (kernels). Remember that grown people can have diphtheria, and that it can be had more than once.

DIAGNOSIS.

To decide whether your child has diphtheria or not, you should consider:

1. Is there any diphtheria in your neighborhood? Has the child been exposed on a visit, etc?
2. Has it the above symptoms? Remember that tonsillitis sometimes very closely resembles diphtheria. If there is any doubt at all, have a laboratory examination made.
3. *Send a specimen to one of the Laboratories of the State Board of Health for examination.* A request will bring a container with full directions for its use.

TREATMENT.

Call in a physician. Do not oppose the giving of antitoxin as it is harmless and its great value is shown by the fact that it has decreased the death rate of diphtheria from 90 in every hundred who had it to 3 or 4. Insist that the other children of the home and the nurse be given an immunizing dose. Keep every one but the nurse out of the room of the little patient.

A WORD ABOUT ANTITOXIN.

Diphtheria antitoxin belongs to the same general class of substances as the white of an egg. When blood is allowed to stand in a jar or bottle, the solid part will settle to the bottom, leaving on top a clear, tenacious liquid. Diphtheria antitoxin is nothing but this liquid part of the blood of a horse that has been rendered immune to diphtheria. It has no chemicals of any nature in it. To go into the reason of its value would be too technical and take up too much space. It is sufficient to say that it has been used successfully in hundreds of thousands of cases, and in the period since it became known, has saved more lives than vaccination against smallpox.

PROPHYLAXIS.

If you have reason to believe that you or your child have been exposed to diphtheria, have your physician give an immunizing dose of

antitoxin. Get some antiseptic gargle and use three times a day for a week. In spraying the nose, stick the nozzle of the spray *straight back, not upward*. If there is diphtheria in school, do not stop the child. Have an immunizing dose of antitoxin given, carry out the above instructions about gargling and spraying, and there will be little or no danger.

THE SICK ROOM AND DISINFECTION.

As soon as the diagnosis of diphtheria is made, the patient should be removed to a well-lighted and well-ventilated room as far from the other members of the home as possible. Give an abundance of fresh air, but do not expose the patient to draughts. Sheets wrung out of carbolic or other antiseptic solutions, and pans of antiseptic solutions placed about the room are worse than useless. The clothing and bedding of the patient should be soaked in a solution of bichloride of mercury made by adding two $7\frac{1}{2}$ -grain antiseptic tablets to the quart of water before putting out to wash. The dishes used by the patient should be treated in the same way. Before leaving the room, the patient should have a bath, including the hair, in a solution of bichloride of mercury made by adding one tablet to the quart of water, followed by an ordinary soap and water bath. The mattress should then be shaken up, and the room disinfected with formaldehyde gas.

J. E. T.

A FEW WORDS ABOUT SMALLPOX AND VACCINATION FOR THE LAYMAN.

Smallpox is a communicable disease, varying in intensity, and characterized by an eruption which, at first, feels like duck-shot embedded in the skin, later becomes pustular, and finally ruptures with the formation of scabs. These scabs are thick, black, and show a central depression. When about to fall off the edges become everted.

SYMPTOMS.

Usually the first symptom is more or less of a chill followed by a violent frontal headache, which has been described as similar to the pain caused by a tight band about the head. The fever rises steadily, and by the end of the first day may reach 104 to 105 degrees F. Backache, pain in the pit of the stomach, vomiting, and aching of the bones, especially around joints, are common symptoms. Until the appearance of the eruptions the patient is restless and finds it almost impossible to sleep, but as soon as the eruption appears, the temperature begins falling and the patient drops off into a refreshing slumber.

The eruption of smallpox makes its appearance on the third day and almost always begins on the parts exposed to air, as the hands, face, etc. It rapidly spreads and in the course of twenty-four hours may cover the entire body. In differentiating smallpox from chickenpox, it is well to remember that the eruption of smallpox favors the face and extremities and will be found in the palms of the hands and on the soles of the feet.

At first the future pock resembles a flea-bite. By the following day the flea-bite has enlarged and feels like a shot under the skin. Usually by the third day it will be found to contain a clear liquid and now somewhat resembles a blister with a raised base. These "blisters" feel hard, a fact to be remembered, as no condition with which smallpox is likely to be confounded presents these firm vesicles. About the sixth day after its appearance, the blister will have a yellowish or creamy look and the depression in the center becomes noticeable. About the eighth day after its appearance, the pock will rupture and discharge more or less of its contained pus. It is now ready to scab over.

CONTAGIOUSNESS.

Smallpox is contagious from the beginning of symptoms until all the scabs have fallen off (from the fifteenth to eighteenth day after the first appearance of the eruption) and isolation should be enforced for this period.

MANAGEMENT.

As soon as a diagnosis is made, and before, if there is any smallpox in the community, each and every person who has not been successfully vaccinated within the preceding five years, should be vaccinated, and re-vaccinated until it takes. If it does not take the first time, try it again as practically no one is immune. It is nothing short of criminal to hide a case of smallpox, fearing if it became known, that vaccination would be enforced. This procedure is not alone the essence of unfairness to your neighbors and neighbors' children, but is unnecessary, as vaccination will be forced on no one, the State Board of Health leaving the choice to each individual as to whether he had rather be vaccinated and escape smallpox, or not be vaccinated and take his chances.

Upon release from isolation, the room occupied by the patient should be opened to sunlight and fresh air. All the bedding and clothes used by the patient during the illness should be boiled for thirty minutes. The floor and woodwork of the room should be washed with a 1:2000 solution of bichloride of mercury.

SMALLPOX A DANGEROUS DISEASE.

The contempt with which a great many people think of and treat smallpox nowadays is a fool's paradise. While it is true that the smallpox we are now having in Florida is a very mild type, we have no guarantee that it will remain so, as it has been known for ages that one epidemic will be light and another severe. Do not be misled into believing that vaccination has decreased the danger to an unvaccinated person. There is a mass of evidence showing that it has not. I saw an unvaccinated case last year, with approximately 7,000 pustules on his body. We estimated that these pustules contained over two quarts of pus. The case terminated fatally.

SOME FACTS REGARDING THE VALUE OF VACCINATION.

From 1907, when the systematic vaccination of Manila and the surrounding six provinces was completed, until March, 1911, not a single

person in this territory had died from smallpox. Prior to this time the annual death rate from smallpox in this district had never fallen below six thousand.

During the past three years 934 cases of smallpox have been treated by the State Board of Health at the Duval county detention hospital. Of these only 5 had ever been vaccinated.

A recent epidemic in Ontario, Canada, developed the fact that in 83 cases only three had ever been vaccinated.

Smallpox broke out on a United States transport bound from Manila to San Francisco. Investigation disclosed that of the 292 passengers and crew, only three had not been vaccinated. Only these three unvaccinated people developed smallpox.

During the month of November, 1913, thirty-eight cases of smallpox were reported in Toledo, Ohio, and carried to the detention hospital. Not a single one of these had ever been vaccinated, and no one whose duty it was to handle the disease took it.

Instances of the value of vaccination in preventing smallpox could be multiplied ad infinitum, but it is not necessary. Any one who really doubts its efficacy can find, with very little trouble sufficient evidence to convince him.

As to the statements so frequently heard that so-and-so lost his arm, or came near losing it, as a result of vaccination, investigation will invariably disclose the fact that the danger was not due to the vaccination, but to a subsequent infection. People lose their arms, or have serious trouble with infections following a mere scratch, yet, no one thinks it was the little scratch itself that caused the trouble. So it is with vaccination. Do not pick at the place, keep it clean with boiled water and a soft clean cloth and no trouble will result.

SUMMARY.

1. Smallpox is a dangerous disease.
2. No one is naturally immune.
3. Vaccination gives an absolute immunity for approximately five years.
4. "Shot-gun" quarantine will no longer be permitted in Florida. If you are afraid of smallpox, be vaccinated.
5. If vaccination does not take the first time, try it again. If it has refused to take after many trials and smallpox breaks out in your community, try it again—get some fresh virus.
6. Vaccination, *per se*, has never been known to cause serious trouble.
7. Don't blame the State Board of Health if you or your child develops smallpox. Whether your child takes it, and goes through life pitted and scarred is a matter for you to decide.
8. The officers of the State Board of Health would know that smallpox had been relegated to the dump heap if every man, woman and child in Florida were successfully vaccinated now, and re-vaccinated at periods of five years.

J. E. T.

LEGALIZING CRIME IN FLORIDA.

Human life is the most precious thing in the world. That's the theory.

We take chances with it that we wouldn't take with the life of a horse. That's the fact.

The State of Florida demands that the physician shall undergo a rigid examination of his qualifications before he is permitted to practice his profession. The standards are being raised every year in Florida. Yet the people of the State permit ignorant women, white and black, to trifle with the life of the expectant mother and with that of the new-born infant. It exercises no supervision over their practices and allows them to attend such patients in the time of their greatest peril and when they need and should have the most skillful attention and sympathetic, gentle care. Nearly every community in the State is bearing the burden of the presence and activity of ignorant midwives, most of them negro women, who are called upon to attend other women of both races at the birth of their children. They are a menace through their ignorance, by their direct interference with the laws of nature, by their neglect and often by their superstitious foolishness, which in extreme cases results in the practice of the senseless rites of voodooism. The medical men of Florida, and probably of every other Southern State, could recite from their own experiences stories of horrible practices and more horrible results of midwifery, which would suggest the tortures of the dark ages.

The practice of these ignorant women, operating without any supervision of legal authority and even with the implied sanction of the State, is a menace to the mother and to the child. In many cases the mother's life would be safer in the hands of a person of ordinary intelligence than in charge of the midwife, for then there would be at least no interference with the laws of nature.

No physician approaches such a case without a serious recognition of his responsibility and an apprehension of possible complications, for which he is prepared. Such apprehension does not appeal to the ignorant midwife nor is she prepared to meet emergencies. The only imaginable reason for her existence and toleration appears to be that her charges are less than those of a reputable physician.

The dangers to the child are hardly less than those that threaten the mother. Life-long deformity, disease and blindness are possible and common results of neglect at the time when the babe is ushered into the world. The first hour of its independent existence is burdened with possibilities that may affect its entire life. The poison of inherited disease may close its eyes forever in incurable blindness. The educated physician anticipates this and with a simple treatment reduces the chances to the minimum.

The neglect by ignorant midwives at this time is the prolific cause of sore eyes, excoriations, ruptures, ulcers, colic and other infantile troubles. If a physician should be found guilty of such neglect, he would be banished from the profession. Probably he would be made

to pay heavy damages through the action of outraged law and public sentiment, and he might be fortunate in escaping imprisonment for his acts.

This is a plain and a painful subject, a serious one, which outside the conferences of medical men must be limited to general statements. From an article intended for general reading, a discussion of specific abuses must be barred. Yet a few facts taken from the experiences of Florida physicians will illustrate some abuses and superstitions not uncommon in the practice of midwives.

A child, immediately after birth, was placed under a table to insure its future good behavior.

To appease his satanic majesty, who was presumed to be interfering with the safe delivery of a child, a black hen was hacked to pieces with a dull knife, the mother meantime a suffering and unattended witness of the superstitious act.

A mother in her agony, was switched by the attending granny to produce quicker progression in her labor.

A child, immediately after its birth, was passed to and fro between the rungs of a ladder, but the old woman refused to explain what was to be accomplished by the senseless performance.

These are a few of scores of recitals taken from the notes of Florida doctors, but they serve to illustrate the degree of ignorance that controls the activities of many women who are entrusted daily with that most sacred possession—human life.

More than this—in many instances the midwife, having more or less successfully ushered a new being into the world, continues to treat the child's ailments for the months and years of its early infancy.

A few facts from the records of the City Health Department of Jacksonville have recently been published by Health Officer, Dr. C. E. Terry, which emphasizes the necessity of an active supervision of midwifery. It is probable that these facts could be substantiated by similar experiences in every community in Florida. He says that these records note seven deaths of children from lockjaw in ten months in Jacksonville in the practice of midwives. During the same period there were sixty-seven deaths of children who had been attended from birth to death by midwives and none of these cases had been seen by a physician. Thirty-nine death certificates of children in Jacksonville in 1912, were signed by midwives.

Probably it is impossible to banish the midwife from the community, for the patient and family have the right to employ whom they please or to be unattended in an illness, although the State has the right to interfere against ignorant parents or guardians in behalf of the helpless child. The State also has the right to license the midwife and to demand that she shall have certain qualifications preliminary to the practice of her profession. It may insist on a fixed degree of intelligence without which no person may be allowed to prey upon the community.

In the absence of a State law covering these conditions, it is within the constitutional rights of any municipality to regulate them. It is probable that the need for such enactment will be brought to the attention of the next Florida legislature, in 1915, eighteen months in the future. In the meantime, Florida cities should use their authority.

Jacksonville's health department is urging upon the city council the passage of a carefully framed bill, and the sooner it becomes a law of the municipality, the sooner will some distressing conditions be removed. The enforcement of this act would entail no expense upon the city, for local medical men have given assurance that the needed examinations of midwives and the determination of their fitness will be undertaken by the profession of Jacksonville. It is an attempt to relieve at least one Florida city from the penalties of legalized crime.—*Press Service, State Board of Health.*

PELLAGRA—BRIEF COMMENTS ON OUR PRESENT KNOWLEDGE OF THE DISEASE.

(By C. H. Lavinder, Surgeon, United States Public Health Service.)

The literature of pellagra continues to increase in volume, but our actual knowledge of the nature of the disease still leaves much, very much, to be desired. The etiology of pellagra remains in obscurity. The Italian school continues to ring changes on the corn theory, while the American school seems largely inclined to regard pellagra as an infectious disease of some undetermined nature. A review, however, of the proceedings of the last Italian Congress on Pellagra and of the last meeting of the American Association for the Study of Pellagra, along with other recent literature, leaves one in the end about as wise as in the beginning. There have been two or three reports of the successful production of pellagra in the lower animals, especially in the monkey, but these all await confirmation, and at present may be accepted with very much doubt. Taking all things into consideration, at present the safest point of view with regard to the causation of this disease is probably one of frank agnosticism, backed up by a healthy spirit of criticism and investigation, with the suppression of all desire to rush into print with immature speculations, fantastic hypotheses, and incomplete experimentation. "Prove all things," said the apostle; "hold fast to that which is good"—a precept no less applicable to medicine than to morals.

Much good work has been done on the epidemiology of pellagra. Such work has added materially to our knowledge of the disease along certain lines, but so far no one has been found who can place upon these facts any interpretation which promises to lead us to a better comprehension of the real nature of pellagra. It is well to remember that this kind of investigation, while valuable, must ultimately be completed by experimental proof. It is worthy of remark that Sambon has shown, what was already suspected, that the disease is far more prevalent than has been heretofore stated. In striking confirmation of this fact he has reported recently the discovery of over 50 cases of the disease in the

British Isles. In the United States, while accurate data are lacking, there is little doubt that pellagra continues to spread, and numerous cases are now found where the disease scarcely existed a year ago.

Needless to say, nothing of consequence has been added to our knowledge of the symptomatology of pellagra. It would seem still wise, however, to repeat a word of caution against hasty diagnoses in doubtful cases; still more important not to overlook frank cases of pellagra and call them "skin erysipelas," which, in spite of all that has been written or said, is still being done by some medical men.

Some more or less recent studies of the pathologic anatomy have appeared, but these students do not seem in entire accord among themselves, and so far this line of investigation has not materially aided in throwing any light on the true nature of this malady.

It is no uncommon thing to hear doctors lament the difficulties surrounding the prognosis of pellagra. The chief disturbing point is, "When may one say the disease is cured and the patient finally recovered?" The answer to this question is just about as definite as the answer to such a question would be in tuberculosis of the lungs. A recovered pellagrin, under proper conditions, may remain in a good state of health indefinitely; but, like sufferers from tuberculosis, such a patient must always remember the possibility of a recurrence, and both he and his doctor should govern themselves accordingly. Pellagra in this respect does not differ from other diseases which might be mentioned, and there is therefore nothing mysterious about the matter.

The patient and doctor alike all seek some specific remedy for this, as well as other diseases. There is none for pellagra, and there is none for the vast majority of our diseases. Lacking a specific remedy, however, we have no need to throw up our hands in despair. There is no specific remedy for typhoid fever, for example, though there is a very logical treatment for this disease which, properly applied, gives good results. Likewise in pellagra there is no specific drug, but there is a treatment which gives good results, especially if applied in early cases. This treatment is largely summed up in the removal of the patient from his surroundings, if possible, and preferably to an institution, proper diet, properly regulated rest, hydrotherapy, and intelligent attention to general symptomatic treatment without too much drugs. Such treatment for pellagrins implies the use of institutions for this purpose, and we have none. We have at least partially met this difficulty in the treatment of tuberculosis, however, and pellagra may demand the same thing. The Italians have such places and report excellent results.

Arsenic enjoys the reputation of being very beneficial in this disease. It would seem, however, that a word of caution is necessary in the use of this remedy. I feel satisfied that many times arsenical preparations have been used in the treatment of pellagra to the detriment of the patient, and I would counsel careful judgment in the administration of such a remedy in this disease. Especial caution is needed with regard to the employment of the so-called arsenical preparations, such as atoxyl and salvarsan. These remedies are potent both for good and ill, and

to use them without careful deliberation is sometimes to invite disaster. Personally, I agree with the majority who have had experience, that salvarsan in pellagra is not only useless, but very often dangerous as well. To misuse a good thing and thus jeopardize its worth is an offense against common sense.

STATISTICS.

SMALLPOX.

Reported cases of smallpox in Florida, December, by counties (380 vaccine points distributed) :

Alachua	1
Duval	13
Hillsboro	3
Marion	1
Total cases, December.....	18
Total cases, 1913.....	1,166
Total deaths reported, 1913.....	4

RABIES.

Report of rabies in Florida, December, by counties:

	<i>No. persons treated.</i>
DeSoto	1
Hillsboro	1
Number persons treated, December.....	2
Total number persons treated January 1, 1913, to January 1, 1914	106

GLANDERS.

Report of outbreaks by counties, December, 1913:

Duval (horse)	1
Total number cases, 1913, in mules and horses.....	62
In humans, 1913	1

HOG CHOLERA (Distribution of Serum).

Amount hog cholera serum distributed, December.....	35,250 c. c.
Amount hog cholera serum reported administered, December.....	14,620 c. c.
Number hogs reported treated, December.....	680
Total weight hogs reported treated, December, pounds.....	59,365

TICK ERADICATION.

Cattle dipping vats constructed, December:

Alachua county, at Gainesville.....	1
Total vats built in Florida.....	32

PUBLICATIONS ISSUED, DECEMBER.

Publication No. 107, "Facts About Hog Cholera Serum and Its Distribution."

SPECIMEN EXAMINATION, BACTERIOLOGICAL LABORATORIES.

	Jacksonville.	Tampa.	Pensacola.	Total.
Animal parasites	135	170	35	340
Diphtheria	466	120	181	767
Gonorrhoea	42	38	35	115
Malaria	147	204	25	376
Pathological	6	7	..	13
Rabies	6	1	..	7
Tuberculosis	131	63	28	222
Typhoid Fever	115	88	13	216
Water (for sewage contamination)	6	1	..	7
Miscellaneous	25	8	68	101
	—	—	—	—
	1,079	700	385	2,164

Grand total number specimens examined by State Board of Health Laboratories, December 2,164

DISTRIBUTION OF DISEASES DIAGNOSED IN DECEMBER.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

—MALARIA—

Town.	Diphtheria.	Gonorrhoea.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Apalachicola	2	..	..	..	..	..	..	..	..	2
Apopka .....	..	..	..	..	..	..	1	..	..	1
Arcadia	2	..	..	..	..	..	1	1	..	4
Archer .....	..	..	..	..	..	..	..	..	1	1
Bartow .....	..	..	..	..	..	..	..	..	1	1
Bowling Green .....	..	..	..	..	..	..	..	..	1	1
Boynton .....	..	..	..	..	..	..	..	1	..	1
Bushnell	1	..	..	..	..	..	2	..	..	3
Carrabelle .....	..	..	..	..	..	..	..	..	1	1
Campville .....	..	..	..	..	..	..	..	..	1	1
Camp Walton .....	..	..	..	..	..	..	..	..	1	1
Cedar Key .....	..	..	..	..	..	..	..	1	..	1
Chipley .....	..	..	..	..	..	..	1	..	..	1
Daytona	1	..	..	..	..	..	..	..	..	1
Delray	1	..	..	..	..	..	..	..	..	1
Eustis	1	..	..	..	..	..	..	..	..	1
Fort Myers .....	..	..	..	..	..	..	..	1	..	1
Fort Pierce .....	..	..	..	..	..	..	..	3	1	4
Gainesville	1	..	..	..	..	..	1	1	..	3
Gotha .....	..	..	..	..	..	..	..	1	..	1
Green Cove Springs	1	..	..	..	..	..	1	..	..	2
Greenville	1	..	..	..	..	..	..	..	..	1
Hernando .....	..	..	..	..	..	..	..	..	1	1
Jacksonville	18	8	1	..	2	3	9	12	5	58
Key West .....	..	..	..	..	..	..	..	2	..	2
Kathleen .....	..	1	..	..	..	..	..	..	..	1
Lake Butler .....	..	..	..	..	..	..	3	..	..	3
Lake City .....	..	..	..	..	..	..	..	1	..	1
Largo .....	..	..	..	..	..	..	..	..	3	3
Lemon City .....	..	..	..	..	..	..	..	1	..	1
Carried forward	28	10	1	0	2	3	19	25	16	104

Distribution of Diseases Diagnosed in December—Continued.

—MALARIA—

Town.	Brought forward	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Limestone	..	28	10	1	0	2	2	19	25	16	104
Live Oak	3	..	..	..	..	..	..	1	..	1	1
Mandarin	..	..	..	..	..	..	..	..	..	1	1
Marianna	..	..	..	..	..	..	..	1	..	..	1
Monticello	..	..	..	..	..	..	..	..	1	..	1
McIntosh	..	..	..	..	..	..	..	..	..	3	3
New Smyrna	..	1	..	..	..	..	..	..	1	..	2
Orlando	1	2	..	..	..	..	..	1	7	3	14
Pine Mount	..	..	..	..	..	..	..	1	..	..	1
Plant City	1	..	..	..	..	1	..	..	..	..	2
Sanford	2	..	..	..	..	..	..	..	..	4	6
Sarasota	..	..	..	..	..	..	..	..	..	5	5
Sebastian	..	..	..	..	..	..	..	..	..	1	1
St. Augustine	1	..	..	..	..	..	..	..	..	1	2
St. Petersburg	..	..	..	..	..	..	..	..	1	..	1
South Jacksonville	..	1	..	..	..	..	..	..	..	..	1
Starke	..	..	..	..	..	..	..	1	..	..	1
Tallahassee	16	..	..	..	..	..	..	6	1	3	26
Umatilla	..	..	..	..	..	..	..	..	..	3	3
Wauchula	..	..	..	..	..	..	..	..	..	1	1
Webster	..	..	..	..	..	..	..	..	..	1	1
Total	52	14	1	..	3	3	30	36	43	182	—

REPORT OF TAMPA LABORATORY.

Fort Ogden	1	..	..	..	..	..	..	..	..	..	1
Floral City	1	..	..	..	..	..	..	..	..	1	2
Sarasota	1	1	..	..	..	..	..	..	..	..	2
Boca Grande	1	..	..	..	..	..	..	..	..	..	1
Lakeland	2	..	..	..	..	..	..	4	1	..	7
Release Cultures	11	..	..	..	..	..	..	..	..	..	11
Fort Meade	2	..	..	..	..	..	..	..	..	..	2
Fort Myers	..	..	..	..	..	..	..	1	1	..	2
Clearwater	..	..	..	..	..	..	..	1	..	1	2
Safety Harbor	..	..	..	..	..	..	..	1	..	1	2
Plant City	..	..	..	..	..	..	..	2	..	..	2
Jacksonville	..	..	..	..	..	..	..	1	..	..	1
Dade City	..	..	..	..	..	..	..	1	..	..	1
Bradenton	..	..	..	..	..	..	..	1	..	..	1
Tarpon Springs	..	..	..	..	..	..	..	..	1	..	1
Bartow	..	..	..	..	..	..	..	..	..	1	1
St. Petersburg	..	..	..	..	..	..	..	..	..	1	1
Tampa	21	9	..	..	..	..	8	10	13	17	78
Total	—	—	—	—	—	—	8	22	16	22	118

Distribution of Diseases Diagnosed in December—Continued.

REPORT OF PENSACOLA LABORATORY.

—MALARIA—

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
St. Andrews .....	..	: Gonorrhœa.							1	1
Campbellton .....	..	..	..	..	..	..	..	..	2	2
DeFuniak Springs..	..	..	..	..	..	..	..	..	2	2
Panama City	1	..	..	..	..	..	..	..	..	1
Tallahassee	2	..	..	..	..	..	..	..	..	2
Pensacola	1	10	..	..	..	1	..	5	2	19
Total	3	11	..	..	..	1	..	5	7	27

Total cases of principal diseases diagnosed by Laboratories of the State Board of Health during December:

	Diph- theria.	Gonor- rhœa.	Malaria.	Typhoid.	Tuber- culosis.	Hook- worm.	Total.
Central Laboratory..	52	14	7	30	36	43	182
Tampa Laboratory...	38	12	8	22	16	22	118
Pensacola Laboratory	3	11	1	..	5	7	27
Total for State..	93	37	16	52	57	72	327

OF INTEREST.

Dr. E. W. Diggett, a special assistant to the State Health Officer, investigating disease and social customs among the Seminole Indians of the Everglades during last autumn, reports the following unique case seen by him when passing through Fort Myers:

"Through the courtesy of Dr. A. P. Hunter, county health officer of Lee county, I saw a patient of his, a boy, ten years of age, white.

"The history was of severe attack of ground itch which did not respond to treatment but became progressively worse. Dr. Hunter treated the case for several weeks. He was brought to the doctor from up the river, and allowed to remain in town for treatment. Diagnosis of hookworm made and patient placed upon thymol, usual dosage.

"When seen by Dr. Hunter, patient still showed signs of ground itch, was very much emaciated, and had some oedema of the lower extremities. After being under treatment about one week patient suddenly developed excruciating pain in large toe of left foot, which could only be relieved by repeated doses of morphine. At this time I was called in consultation by Dr. Hunter. Moist gangrene had become apparent, line of demarcation being well up on the ankle. The foot was entirely gone, a pulpy foul smelling sack being the only remains.

Dr. Hunter and myself decided to operate at once and, in compliance with Dr. Hunter's request, I amputated the leg just below the knee joint.

The subsequent history of the case is very interesting. The patient got along very nicely, regained his strength, color returned to his cheeks, appetite became normal, and in a short time regained his former weight.

This is the only case of gangrene that I have seen following severe ground itch and hookworm; presuming this was the cause, and I fail to see what other cause could be assigned."

Dr. Diggett adds:

"I had an opportunity to go over some of the work done four years ago; saw several cases treated by Dr. Hunter and myself at that time. It was very gratifying to receive the thanks of these patients, and to see the marked improvement in their appearance."

VITAL STATISTICS.

THE BOOKKEEPING OF LIFE AND DEATH.

The test of any public innovation is: "Does it pay the state, does it pay the community, does it pay the citizen?" It is the purpose of this article to show that the collection of vital statistics pays the state, the community and the citizen.

In Brazil there are areas of land larger than any state in the Union, capable of the highest state of cultivation, and on which practically anything can be raised, uncultivated and almost uninhabited because of the prevalence of disease. I cite this merely to prove that a state may have areas combining all the advantages of climate, rainfall and soil, and yet these areas are not productive of wealth because of real or fancied unhealthful conditions.

If, as is the case of our own State, misrepresentations of disease areas have been made, vital statistics furnishes the only method of successfully contradicting these misleading and damaging rumors. If it did nothing towards the material welfare of Florida, other than furnish figures proving that our morbidity and mortality rate is far below the prevalent idea among people who are not acquainted with the facts, it would be worth millions of dollars; but vital statistics does much more than this. It directs the energies of the Board of Health, by showing where the weak places are; where the sanitary supervision of the Board is most needed to correct errors of sanitation; it "legalizes" the birth of every child in the state; it prevents to a far greater extent than a superficial consideration of the subject, would seem to indicate, certain crimes; and, lastly, it puts Florida in line with practically the whole United States, as well as the more enlightened European nations, who have recognized the tremendous importance, and are now rigidly enforcing the accurate collection of such statistics.

In addition to the general value of vital statistics, any town in which they are accurately collected will find that these statistics work out a solution of many vexing sanitary problems. In the course of the year the relative prevalence of diseases is to a large extent forgotten, and also physicians do not get together and ascertain the entire number of cases of any particular disease. Vital statistics does this, and in so doing, furnishes the local health department invaluable data. And in addition to this our present day conception of community-life recognizes the right of every inhabitant to know of the presence and location of certain diseases, which are known to be communicable. Vital statistics furnishes this information.

Vital Statistics—Continued.

The collection of vital statistics furnishes the citizen with legal proof of citizenship. It is a lamentable fact that even the proudest of our people can not prove their descent for more than two generations, while the peasants of Europe can trace theirs for hundreds of years, and aside from the aesthetic value, it has to every citizen a far-reaching material value. Questions of inheritance are continually arising, the settlement of which depends upon legal proof of descent. In some foreign countries a birth certificate is a sine qua non in the transference of realty. Entrance into the public school systems of many places requires birth certificates. Questions of age with reference to occupation, life insurance, etc., frequently make a birth certificate of great value, and last, but not least, in case of sudden death, a birth certificate might be the only means of giving a child an honorable identity.

Appreciating these facts, the State Board of Health will spare no effort in making this work a success, and to this end, it is urged upon all registrars, physicians, and the public generally that accurate records be kept and that the purview of the undertaking be fully carried out. Its value can not be questioned—and we (the vital statistical department of the State Board of Health and the registrars) must use every means of giving the people of Florida the benefit of such a momentous endeavor.

The accurate compilation of vital statistics furnishes a State with data from which campaigns against a disease can be successfully outlined.

The wealth of any State depends more on the health of its citizenry than on all other factors combined.

NOTICE TO REGISTRARS.

MONTHLY REPORTS.

To allow time for all birth and death certificates of the preceding month to be filed, which the three days previously required does not give, it has been decided, in conformity with the Model Law, to ask that each registrar "*on the tenth day of each month transmit to the State registrar all original certificates registered by him for the preceding month.*"

Certificates should be kept flat, as they are to be bound, and *mailed promptly on the tenth day of each month* in the large addressed envelopes supplied for that purpose.

Vital Statistics—Continued.**REQUISITES TO MAKE VITAL STATISTICS RECORDS
VALUABLE****SHOULD BE COMPLETE.**

Every birth and every death should be reported by some one having knowledge of the facts, preferably a physician. Unless 90 per cent are reported, the returns are of little use and are often misleading. Registrars can not expect payment if reports do not reach such degree of accuracy.

SHOULD BE PROMPT.

The necessary information regarding deaths and births is often quickly forgotten and the persons having such information lost sight of, so promptness is the essence of good reports. Certificates should be filed immediately after a birth or a death. And registrars should send their monthly reports to the State Board of Health promptly.

SHOULD BE ACCURATE.

Every question should be answered and every blank filled out; if the information is not obtainable, the omission should be explained by the words, "Unobtainable" or "Unknown." Many of the questions may seem unnecessary and unreasonable, but each has been carefully considered by experts, and all are needed either for legal record or medical statistics.

SHOULD BE LEGIBLE AND PERMANENT.

All certificates, either of birth or death, should be legibly written (or type-written) in unfading ink. This is a necessary protection that these invaluable records may be permanently preserved for future reference. Otherwise they would be undecipherable and in a short time fade and lose their value as legal or other evidence.

SHOULD HAVE PROPER CAUSE OF DEATH.

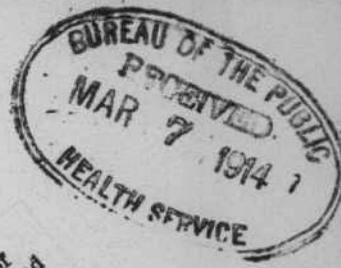
Physicians should be careful in assigning cause of death, that deaths may be properly compiled and tabulated, and registrars should return certificates for correction when needed before sending them to the State Board of Health. When no physician attended decedent, the Health Officer, or the coroner in any suspicious case, and the registrar only in their absence, should sign the death certificate.

SHOULD BE PRESERVED AND IN ORDER.

Registrars should make copies in their Record Books for local record and should number each certificate consecutively, beginning a new series the first of each year for both births and deaths in new books. This will insure each community an orderly reference, while the originals will be safely kept and carefully indexed at the State Board of Health where certified copies can be obtained upon request.

SHOULD HAVE THE SUPPORT OF THE PUBLIC.

Every citizen of the State should loyally support this work, and see that every birth and death is reported to the registrar if it occurred in a city of 2,000 population or over, otherwise to the State Board of Health direct. If every one does his part there will be no question as to necessary 90 per cent of all births and deaths being reported and Florida will soon be in the registration area and have her mortality reports published by the Census Office as an authoritative statement of her healthfulness.



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Address communications to Jacksonville, Fla.

"It seems to me that there is almost nothing more important in the entire field of statistics than vital statistics, because of their direct bearing upon the health and consequent welfare of the people."—E. Dana Durand, Director of the Census, Washington, D. C.

Vital Statistics

Pages 32, 33, 34, 35, 36

IMPROVE THE HUMAN STOCK.

The creation of man presupposes him to have been made physically perfect, for it is declared that he was fashioned in the image of the Divine Master and Creator. Man's degeneration results from violation of natural law.

A problem which has been harassing the minds of sanitarians for ages, and is today agitating the thinking public, especially those studying eugenics, is how the human stock can be improved on, and possibly restored to its first perfect state. Our farmers meet in their associations and, discussing the betterment of their stock, consider the advantages and disadvantages of interbreeding. The horticulturists are delving into grafting, and like Burbank, evolving wonderful transformation in plant industry. The sportsman contributes the results of study and acquaintance with the habits and peculiarities of stock in the bettering and improving of each generation from a special breed of horse or dog. That which is styled "blood" in an animal does not necessarily betoken physical perfection; it is rather the exhibition of some special trait or quality, such as speed, intelligence or beauty more than endurance, which latter would denote strength and health. While man devotes time and thought to the improvement of stock, and by experiment and observation has wonderfully increased its value and quality, it is strange that so little thought has been bestowed upon that higher animal, man, in his physical development.

Disease, which is the curse transmitted for disobedience to nature's laws, to the fourth and fifth generation, is both acquired and inherited. With the first part of this proposition we are not dealing in this discussion; it is with the latter, the inherited tendency; that which, through the ill-mated physically, so much of the suffering and unhappiness which afflicts mankind is begotten; to say nothing of financial loss to the State in the consequent care of the numerous institutions for the treatment of disease made necessary by this constantly increasing physical degeneration.

Some months ago the writer chanced to be at a hotel table in Jacksonville in company with two prominent railroad officials, and was much interested in a conversation between them as to the supreme duty, as the elder of the two stated it, of the family physician in preventing those under his professional charge from contracting marriages, the results of which would be sickly or weak offspring. He stated his proposition very clearly and forcibly, that while the moral law failed to prevent these unwise, if not unnatural alliances, the State should step in and by law forbid the further production of individuals whose existence, conceived in disease, would surely prove a loss in increasing expense necessary to their care, and thus sap the wealth and working force of the commonwealth.

Whatever caused disease, or from whence it sprung *abi origo*, are questions with which in this day and in connection with this subject we need not discuss. We believe, and have frequently stated, that it resulted primarily from either a wilful or ignorant violation of nature's

law. It is with us, and yearly destroys millions of individuals, and in many diseases so insidious and invisible in progress that medical diagnostic skill is frequently baffled. There are other diseases, however, with which we are acquainted, which work by regular laws, if the term is permissible, and the prevention of which can be had if advice is only heeded. Vital statistics furnishes the information that more people die in the United States yearly from diseases clearly preventable than were killed in all of our wars through battle. We know that consumption is an acquired but not an inherited disease. The public is gradually awakening to the danger of association with this class of individuals in hotels and other public resorts, but it does not yet fully appreciate the misery entailed upon future generations of men and women by the wedding of consumptives, transmitting weak organs—fit soil for the tubercular bacilli to be engrafted on—or the wedlock of one or both, whose vital organs may be affected with some chronic disease. One of nature's unalterable laws is that "like begets like," and it is as rational to expect to gather grapes from thorns as to expect to produce healthy children from parents whose vitality has been lowered or destroyed by disease or through vicious habits. Numerous instances of the evil result of intermarriages are well marked in many of the royal houses of the old world, and even in the new world of America there are localities where due to environment this marrying and intermarrying has almost produced a race of dwarfs and idiots.

The State exercises through its delegated power, authority over the morals and health of its population. It prescribes that marriages which it recognizes only as a civil contract between the parties, shall only be permitted under certain conditions of age and race. Could and should not the protection of future generations through this contract be further extended by prohibiting the issuing of a license to parties who cannot furnish to the State a certificate from the family physician of exemption of both contracting parties from the transmissible diseases, and the excessive use of alcoholic or narcotic drugs? When the State takes hold of this matter and legislates for future generations, the human race will improve in quality, disease will be lessened in extent and man will be restored to his first condition of physical vigor.

These are but scattering thoughts on a grand subject. Neither time nor space will permit an extended discussion. The NOTES throws out the hint to some reflective legislator to enlarge and improve upon. Will our confreres of the daily press agitate the question?

FLIES AND TYPHOID.

Have you ever calculated the cash value of a human life—I mean its value in dollars and cents to the community? A conservative estimate places such value at \$5,000.

Have you ever figured the actual cash cost of a case of typhoid fever? If you have, you know it is more often above than below \$500.

counting lost time, physician's and nurse's bills, drugs, etc. And in addition to the actual cash cost, there is the suffering and worry, but we will not count that—only count the actual cash cost.

Do you know that one person in every ten who has typhoid fever dies? This is merely an average. Frequently an epidemic will take a death toll of one from every five.

Did your physician ever tell you that, in Florida, probably three of every four cases of typhoid are caused by flies? It is a fact, too. Now, let's summarize: Cash value of a human life, \$5,000; cash cost of every case of typhoid, \$500; 75 per cent of typhoid caused by flies; 75 per cent of "summer complaint" caused by flies, and there are other diseases that it is strongly conjectured are fly-borne.

With these facts before you, would you be interested—from a financial standpoint—in decreasing your liability to typhoid 75 per cent; to summer complaint 75 per cent, and to other ailments, etc.?

It will cost something like \$15 to do this—maybe less.

And at the same time you will be decreasing your liability to malaria 90 per cent, if not more.

Also the other diseases enumerated above as being carried by flies. (Do you know that dysentery or summer complaint claims an enormous number of children each year, and that the house-fly causes the greater part of it?)

Have you ever seen a fly—I mean examined one with a microscope? If you haven't, get your physician to show you one. You will see the filthiest of all created things. His legs, body, head, proboscis, and even wings, are gummy with filth and swarming with germs.

Have you ever studied a fly long enough to get a mind picture of his life history? Do you know where he is hatched? And that he comes directly from the cess-pool to your kitchen and dining room? Don't think for an instant that he stops on the way to get a bath. On the contrary, he avoids water, and comes into the dining room—alights on your food, where he deposits his excrement as well as that gathered from his birthplace—in all his *original* filthiness. Do you know that as a fly he is even filthier than as a maggot? If you doubt any of these statements, study him just fifteen minutes—five with the microscope, watch him as a maggot five, and as a fly five.

Now, if you want to insure yourself against approximately 75 per cent of typhoid liability, 90 per cent of malaria liability, 75 per cent of dysentery liability, and a varying per cent of liability to other diseases mentioned, *screen your home thoroughly* and construct for yourself, and endeavor to persuade your neighbors to construct, fly-proof privies. If your neighbors simply will not build fly-proof privies, you can protect your own self and family by thoroughly screening your own home. Also, see that your green grocer has all fruits and vegetables eaten raw screened against flies—and before you eat them, see that they have been washed.

If you don't take these precautions, and some of your loved ones contract one of these diseases and die from its effects, don't "fuss at"

the State Board of Health and feel that it should have eradicated the disease (which is impossible unless you and the other citizens of Florida will co-operate by following our suggestions). Just stop and say to yourself, "If I had done my duty—and I was warned—there is a strong probability that death could have been averted by averting the disease."

And now is the best time to do this little screening job. Tomorrow may be too late—and you will have to stop sometime anyway—so why not do it today? You would drop anything to protect your loved ones from a mad dog, wouldn't you?

J. E. T.

A FEW WORDS ABOUT MEASLES FOR THE LAYMAN.

Measles is an acute, febrile, communicable disease and is characterized by an insidious, bad-cold-like onset with the appearance on the fourth day of a reddish rash.

DIAGNOSIS.

To decide whether your child has measles, you should consider:

1. Is there any measles in your neighborhood? Has the child been away from home where exposure was likely?
2. Did it take two or three days for you to decide that the child was not suffering from a bad cold? Measles comes on exactly like a bad cold while diseases with which it is likely to be confounded come on rapidly.
3. Did the rash appear on the fourth day after the child began sneezing and feeling badly? Did the rash make its first appearance in the mouth? Are the eyes watery? More or less brassy cough? Loss of appetite? Constipation?

MEASLES A DANGEROUS DISEASE.

Unfortunately many people think of measles as merely a nuisance and not a dangerous disease. If this is your view, change it, and do not let any one persuade you that it is necessary for your child to have this disease sooner or later. Be especially careful not to expose your child the first five years of life, as measles is frequently fatal to infants, and is of sufficient gravity to cause any one to avoid exposure as much as possible. Broncho-pneumonia, lobar pneumonia, deafness, weak eyes or blindness, and less frequently heart disease, kidney disease and paralysis are complications which follow the disease.

TREATMENT.

Do not try to treat measles yourself. Have a physician take charge of the case as the complications, against which you do not know how to guard, are the dangers.

Put the patient in a well ventilated room. Do not allow any one to be needlessly exposed. Keep the room darkened. Allow free circulation of air. Keep the bowels open. Give plenty of cool water. Wash the eyes three or four times a day with a milk-warm solution of boric acid in boiled water. If the patient complains of pain or dis-

comfort in the eyes, ears, lungs or throat, call your physician's attention to it at once.

ISOLATION AND MANAGEMENT.

Measles is communicable from the beginning of symptoms until desquamation (shedding) is completed—usually from three to four weeks—and during this time the patient should be isolated as strictly as in scarlet fever.

After desquamation is completed, and before leaving the isolated room, the patient should be thoroughly bathed and have an entire change of clothes. Do not permit exposure to bad weather, for two or three weeks longer.

The room should be opened to the air and sunlight. All articles that can be boiled should be boiled for half an hour. All movable articles that cannot be boiled should be sunned for several hours. The floor and woodwork of the room should be scrubbed with a 1:2000 solution of bichloride of mercury or a 1:40 solution of carbolic acid. If it is not necessary, do not use the room for a week.

SUMMARY.

1. Measles is a very contagious disease.
2. Measles is a dangerous disease.
3. Among the complications to be guarded against are eczema, deafness, weak eyes, broncho-pneumonia, lobar pneumonia, bronchitis, heart disease, kidney disease, etc.
4. For the welfare of the patient as well as the protection of your neighbors, do not allow the child to leave the isolated room until desquamation is completed and the proper precautions against spreading the disease are taken.
5. Be especially careful not to expose a child under five years of age, and if one under this age contracts the disease, watch it closely.

J. E. T.

FLORIDA'S CRIPPLED CHILDREN.

Are the children worth saving?

Rather an abrupt question, but it is prompted by a neglect, all too general, or by an indifference to the infant's welfare so frequent as to suggest at least a failure by some parents to recognize the necessity of early medical or surgical treatment.

How many children come into the world with a fair, even start? With no deformity, no inheritance of malady which, neglected, may develop into a permanent crippled condition or into disease, hopeless and incurable? Troubles which with proper and timely care may be cured? No one may answer the question exactly, but the records show that one-fifth of all the children born in the United States die before they are one year old, one-fourth before they complete the fifth year, and one-third never reach twenty years.

These fatalities are due in part, of course, to causes not connected with prenatal influences, but it is safe to assert that many—a large proportion—result from just these influences.

If the matter be considered from the financial viewpoint, society can make no better investment than to see that its children are well born. Next to that, it is a wise expenditure to see that the weaklings are made strong in their early years, so that when maturity comes with its responsibilities, it will find them equipped, physically at least, to do their part in the world.

Unfortunately only comparatively few of Florida's citizens know that the State legislature is making just that kind of an investment. It is making possible for the poor, who cannot meet the cost of expensive and prolonged treatment, that their crippled children may be cured, that little twisted and deformed limbs and feet and backs shall be straightened, and that they shall not be compelled to exist through a pitiable lifetime with the burden of humped backs and club-feet and hare-lips. It has provided that these children of the poor, who have just as much right to be strong and happy as their richer neighbors, shall have the benefits of the highest surgical and medical skill, that they shall have every needed comfort and attention during such treatment and until they are pronounced well and strong.

Honestly, can you imagine a better way to spend ten thousand dollars of the taxpayers' money every year?

It is due, at least in part, to a general ignorance of this provision that it has not been made more useful to the people of Florida. But twenty-five children received treatment last year, some in hospitals and some at their homes. Photographic records are kept of these cases, and if the people of the State, who pay for these results, could see how some of these little sufferers, coming to the doctors with twisted spines and deformed feet and limbs and with pitiful faces drawn with pain, have been straightened up to be like other children, if they could listen to the laughter and shouts of welcome with which they greet the doctors who have made happiness possible for them, they would declare that many times ten thousand dollars would not be too large a price to pay for it.

The legislature of 1911 passed what is known as "The Crippled Children's Bill." It provided for the establishment and equipment of a hospital for the treatment of indigent crippled children of the State, in which such patients should be received free of charge, and for the purpose twenty thousand dollars was appropriated. It also provided for the maintenance of the hospital the sum of ten thousand dollars a year.

There were some legislators who opposed the appropriation for such an institution—just why no one remembers now—but probably their consciences were under perfect control. However, to meet this objection it was agreed that until the number of patients should be large enough to make it absolutely necessary, this special hospital should not be erected, and that the State Board of Health should arrange for their care in hospitals already in operation. Accordingly, arrangements were made for the care of the white children in St. Luke's Hospital, and for the colored children in Brewster Hospital,

both institutions being located in Jacksonville, where all could be in the charge of one physician. This particular doctor is one of the best known surgeons in the South, and the hardly less than marvelous results he has accomplished are being watched by the profession in all parts of the country.

Now that St. Luke's Hospital has been moved into new and splendidly equipped buildings, on a large plat of ground in the edge of Jacksonville, it has been suggested and urged that the separate hospital, provided for by the legislature, shall be erected here.

The benefits of this institution are open to all deformed and crippled children, whose parents are unable to meet the expense of the treatment, which usually is long, often painful, and requires the highest order of surgical skill and nursing. To secure these benefits, it is necessary only that the parent or the family doctor shall address the State Health Officer at Jacksonville, and on a blank provided for the purpose shall make application for the service. A careful investigation and diagnosis of the case are made and no child who is entitled by a liberal interpretation of the circumstances of each case, will be turned away.

Of course, ten thousand dollars a year does not meet all the absolutely necessary expense, and to supplement the fund, the surgeon in charge gives his services free. Some other Florida citizens—real Christians they are—pay every draft that is made upon them to further this work. Their names are among the best known in the State, yet only those whose business it is to know can identify these names with the givers of this money.—*Press Service, State Board of Health.*

PLEASE READ AND HEED.

All persons living within a radius of fifty miles from Live Oak or Ocala are requested to be cautious of stray dogs. Rabid dogs have been reported from these localities and have bitten a number of other dogs and domestic animals. Dogs bitten will develop rabies in the course of ten to sixty days, and if not carefully watched may be the source of serious trouble.

VACCINATION WINS.

The *Ottawa Citizen* takes comfort out of the fact that among the eighty-three smallpox cases in Ottawa this year only three had been vaccinated, and those twenty-five or thirty years ago. Facts like this go a long way to discourage the arguments of the antis.—*Hamilton Times.*

STATISTICS.

SMALLPOX.

Reported cases of smallpox in Florida, January, by counties (1,344 vaccine points distributed):

Alachua	1
Bradford	1
Dade	2
Duval	20
Hillsboro	1
Lee	3
Manatee	1
Monroe	3
St. John	5
Taylor	1
Total cases, January.....	38

RABIES.

Report of rabies in Florida, January, by counties:

	<i>No. persons treated</i>
Alachua	2
Duval	2
Suwanee	6
Number persons treated, January.....	10

GLANDERS.

Report of outbreaks, by counties, January:

DeSoto (mule).....	1
Duval (horses).....	5
Total cases, January.....	6

HOG CHOLERA (Distribution of Serum).

Amount hog cholera serum distributed, January	55,250 c.c.
Amount hog cholera serum reported administered, January.....	12,590 c.c.
Number hogs reported treated, January.....	719
Total weight hogs reported treated, January, pounds.....	40,475

SPECIMEN EXAMINATION, BACTERIOLOGICAL LABORATORIES.

	<i>Jacksonville</i>	<i>Tampa</i>	<i>Pensacola</i>	<i>Total</i>
Animal parasites	392	141	29	562
Diphtheria	279	107	53	439
Gonorrhoea	50	40	32	122
Malaria	158	258	19	435
Pathological	13	10	1	24
Rabies	8	1	..	9
Tuberculosis	173	84	25	282
Typhoid fever	122	198	12	332
Water (for sewage contamination)...	4	2	..	6
Miscellaneous	35	18	25	78
	1,234	859	196	2,289

Grand total number specimens examined by State Board of Health Laboratories, January 2,289

DISTRIBUTION OF DISEASES DIAGNOSED IN JANUARY.

—MALARIA—

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
REPORT OF CENTRAL LABORATORY, JACKSONVILLE.										
Alachua .....	..	..	..	..	..	..	1	1	..	2
Apalachicola	3	..	..	..	..	..	2	..	5	5
Apopka .....	..	..	..	..	..	..	..	..	1	1
Arcadia .....	..	..	..	..	..	..	1	..	..	1
Archer .....	..	..	..	..	..	..	..	..	1	1
Bartow .....	..	..	..	..	..	..	2	1	..	3
Bronson .....	..	..	..	..	..	..	..	1	..	1
Center Hill .....	..	..	..	..	..	..	..	..	1	1
Centralia .....	..	1	..	..	..	..	..	..	..	1
Clermont .....	..	..	..	..	..	..	1	..	..	1
Cocoa .....	..	..	..	..	..	..	..	1	1	2
Crescent City .....	..	..	..	..	..	..	..	..	5	5
Daytona .....	..	..	..	..	..	..	4	1	..	5
Delray .....	..	..	..	..	..	..	..	1	..	1
Dunedin .....	..	..	..	..	..	..	1	..	..	1
Eustis	3	..	..	..	..	..	..	..	..	3
Emporia .....	..	..	..	..	..	..	..	1	..	1
Fellsmere	2	..	..	..	..	..	..	..	..	2
Ft. Meade .....	..	1	..	..	..	..	..	..	1	2
Ft. Pierce .....	..	..	..	..	..	..	1	6	1	8
Floral City .....	..	..	..	..	..	..	..	..	1	1
Fernandina	1	..	..	..	..	..	..	..	..	1
Gainesville	2	3	..	..	..	1	3	3	..	12
Greenville .....	..	..	..	..	..	..	1	..	..	1
Hawthorne .....	..	..	..	..	..	..	..	..	1	1
Jacksonville	19	13	..	..	..	..	11	20	54	117
Jasper .....	..	..	..	..	..	..	1	..	1	2
Key West	1	..	..	..	..	..	..	1	..	2
Kathleen .....	..	..	..	..	..	..	..	..	2	2
Kissimmee .....	..	..	..	..	..	..	..	..	2	2
Lake Butler .....	..	..	..	..	..	..	1	..	..	1
Lakeland	3	..	..	..	..	..	2	..	..	5
Live Oak .....	..	..	..	..	..	..	1	1	2	4
Mayo .....	..	..	..	..	..	..	1	..	..	1
Mandarin .....	..	..	..	..	..	..	..	..	3	3
Orlando	4	..	..	..	1	..	3	3	4	15
Ocala .....	..	..	..	..	..	..	1	..	2	3
Oviedo .....	..	..	..	..	..	..	..	..	2	2
Palatka	1	..	..	..	..	..	..	..	1	2
Sebastian .....	..	..	..	..	..	..	..	..	2	2
Sanford	1	..	..	..	..	..	..	..	1	2
St. Augustine .....	..	..	..	..	..	..	..	..	1	1
St. Petersburg .....	..	1	..	..	..	..	..	..	..	1
Starke .....	..	1	..	..	..	..	..	..	..	1
Sneads .....	..	..	..	..	..	..	..	..	1	1
Tallahassee .....	..	..	..	..	..	..	..	1	1	2
Tarpon Springs .....	..	..	..	..	..	..	2	..	..	1
Titusville .....	..	..	..	..	..	..	..	..	..	2
Wauchula .....	..	..	..	..	..	..	..	..	1	1
Carried forward	36	24	..	..	1	1	40	43	93	238

Distribution of Diseases Diagnosed in January—Continued.

—MALARIA—

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Brought forward	36	24	..	..	1	1	40	43	93	238
Webster .....	..	..	..	..	..	..	..	..	1	1
Winter Haven .....	..	..	..	..	..	..	..	..	1	1
Williston .....	..	..	..	..	..	..	..	1	1	2
West Palm Beach..	..	..	..	..	..	..	..	..	1	1
Total	36	24	..	..	1	1	40	44	97	243

REPORT OF TAMPA LABORATORY.

Tampa	15	13	1	..	2	2	30	20	11	94
Lakeland	4	..	..	..	..	..	6	2	1	13
Plant City	2	..	..	..	..	..	..	3	..	5
Release Cultures ..	13	..	..	..	..	..	..	..	..	13
Arcadia .....	..	..	..	..	..	..	1	..	..	1
Dade City .....	..	..	..	..	..	..	2	..	..	2
Wauchula .....	..	..	..	..	..	..	2	..	..	2
St. Petersburg .....	..	..	..	..	..	..	1	..	1	2
Fort Myers .....	..	..	..	..	..	..	2	..	1	3
Punta Gorda .....	..	..	..	..	..	..	1	..	..	1
Vaccine Cases .....	..	..	..	..	..	..	5	..	..	5
Kathleen .....	..	..	..	..	..	..	..	..	1	1
Fort Meade .....	..	2	..	..	..	..	..	..	..	2
Fort Ogden .....	..	..	..	..	..	..	..	1	..	1
Clearwater .....	..	..	..	..	..	..	..	1	..	1
Total	34	15	1	..	2	2	53	24	15	146

REPORT OF PENSACOLA LABORATORY.

Pensacola	4	8	1	..	..	..	..	3	6	22
Molino .....	..	..	..	..	..	..	..	1	..	1
Panama City .....	..	..	..	..	..	..	1	..	..	1
Holts .....	..	..	..	..	..	..	1	..	..	1
St. Andrews .....	..	..	..	..	..	..	1	..	1	2
DeFuniak Springs..	1	..	..	..	..	..	..	..	..	1
Marianna	1	..	..	..	..	..	..	..	..	1
Milton .....	..	..	..	..	..	..	..	1	..	1
Total	6	8	1	..	..	..	3	5	7	30

Total cases of principal diseases diagnosed by Laboratories of the State Board of Health during January:

	Diph-	Gon-	Tuber-	Hook-	Total.	
	theria.	rhoëa.	Malaria.	Typhoid.	worm.	
Central Laboratory.....	36	24	2	40	44	97
Tampa Laboratory	*34	15	5	53	24	15
Pensacola Laboratory....	6	8	1	3	5	7
Total for State.....	76	47	8	96	73	119
	—	—	—	—	—	—
						419

* Includes 13 release cultures.

ST. PETERSBURG'S MORTALITY.

There has just been received from the city of St. Petersburg an exceedingly creditable four-page circular of the vital statistics of this characteristic Florida health resort for the year 1913.

The City Health Officer, Dr. William M. Davis, who is now also Registrar, deserves great credit for the gathering, compiling and tabulating of this data, as well as for the good style in which it is published, and the city of St. Petersburg is to be congratulated on having these statistics to show residents and visitors and to those she hopes will be such in the future.

This report is an example of what each Florida city can and should do to make known its health conditions to attract newcomers and visitors.

Every one interested in public health work in the State, especially in the cities now collecting birth and death records, should have a copy of this report, and we have no doubt that a request to Dr. Davis would bring one by return mail.

St. Petersburg is a typical winter resort community, and her officially stated population of 4,127 by the April 15, 1910, census, and 4,955 estimated for July 1, 1913, shows only a part of her average yearly numbers. This is clearly shown by the relation of her resident to non-resident deaths, especially of the white deaths: of her total of 115 deaths, 62 were residents and 53 non-residents; of the 115, 77 were white and 38 colored—of these 77 white deaths, 36 were residents and 41 non-residents, while of the 38 colored deaths, but 26 were residents and 12 non-residents.

The above figures will tend to explain the following mortality rates which are based upon tentative estimates of the now white and colored population. The same rates for Jacksonville for the same year are shown for comparison:

	<i>St. Petersburg.</i>	<i>Jacksonville.</i>
General or crude death rate.....	23.2	19.1
White crude death rate.....	21.2	15.6
Colored crude death rate.....	28.7	22.5
Resident crude death rate.....	12.5	15.7
White crude death rate.....	9.9	11.3
Colored crude death rate.....	19.6	19.9

These rates, it should be explained, are the percentages of the total, the white and the colored deaths, to each 1,000 of the total, the white and the colored population.

The low resident death rates corroborate what St. Petersburg claims to be—a health resort, and the higher general rates only show that many health seekers go there—too often too late.

It is hoped before long, when fuller data is at hand, to give in these columns a more accurate and more extended analysis of the deaths, and also of the births, in this city during the past year.

Enough has been shown, however, to indicate how valuable such a publication is to every Florida city, and we can not conclude better

than by again congratulating St. Petersburg and her Health Officer and Registrar, Dr. Davis.

THE FLORIDA REGISTRATION CITIES.

Below is given some population statistics of the cities of Florida which have been given the opportunity to enter the registration area. All of them have taken steps to collect reports of births and deaths, but a certain few have failed to start the collection from January 1st of this year and in a few others the work is lagging.

The backward ones will not be named—they may, and it is greatly to be hoped they will, be able to soon and actively start the work and make back collections from the first of the year. If any one fails to do so, it can only blame itself, for each has been urged and plead with. And any delinquent one will also have to remember that its failure imperils the chance of all to have mortality statistics published by the census bureau. For of these twenty-nine cities, for West Tampa is now reporting her deaths and births separately from Tampa proper, all those under 10,000 population can only enter the United States registration area and have their deaths compiled by the census office *as a class*.

Of these cities of 2,000 population and over, Jacksonville and Key West have for a number of years been in the area, and Pensacola was admitted in the spring of last year and will have her deaths for 1913 published. There is hardly a doubt that Tampa will be soon admitted to date from January 1, 1914, and there is a possibility that the census office will rule that West Tampa is eligible and admit her at and from same time.

None of the other cities are eligible to be admitted separately and can only enter provided they *all as a class* make reports 90 per cent accurate for the full year.

	1910 Census	1913 Census Estimate April 15. July 1.		1910 Census	1913 Census Estimate April 15. July 1.
Jacksonville	57,699	67,209	Live Oak	3,450	4,031
Tampa	37,782	46,792	Quincy	3,204	3,968
Pensacola	22,982	24,682	Palatka	3,779	3,933
Key West	19,945	20,863	Fernandina	3,482	3,559
West Tampa	8,258	10,174	Daytona	3,082	3,534
Gainesville	6,183	7,011	DeLand	2,812	3,255
Miami	5,471	6,701	Apalachicola	3,065	3,062
St. Augustine	5,494	5,889	Plant City	2,481	3,052
Tallahassee	5,018	5,679	Fort Myers	2,463	2,957
Lake City	5,032	5,363	Bartow	2,662	2,881
St. Petersburg	4,127	4,955	Tarpon Springs	2,212	2,754
Ocala	4,370	4,591	DeFuniak Springs...	2,017	2,543
Lakeland	3,719	4,544	Kissimmee	2,157	2,489
Orlando	3,894	4,353	Marianna	1,915	2,343
Sanford	3,570	4,257			

STANDARD CERTIFICATES.

This office still receives some birth and death reports made out on the old forms; births on postal cards and on the blanks which have no question as to *born alive* or *stillborn* deaths on the form first adopted after discarding the death postals.

Most of these old forms are birth reports from midwives, but physicians still send in some births and more deaths on the old blanks.

All of the States in this Southeastern section, excepting Alabama, Georgia and South Carolina, and nearly all in other parts of the Union, use the *standard certificates* for reporting deaths and also births. These forms have been adopted as the simplest possible to give the necessary facts to identify the individual birth or death and to provide the data needed to compile the many elements of the life movement of the nation. Not only is it necessary that these records of births and deaths be comparable within the United States, but also as far as possible throughout the countries of the world where any statistics of this kind are gathered, and these blanks are in many ways similar to those of foreign nations.

Every question asked is of importance and has been carefully weighed and found to be needed, so it is urged that every one be answered if possible.

If any physician, midwife or other person likely to report a birth or death, is without a supply of these standard certificates he is only to request this office and they will be sent at once.

THE VALUE OF VITAL STATISTICS.

WHY REGISTER DEATHS?

1. That there may be available complete and accurate information as to deaths of all human beings, with dates of death and causes of death, to the end that preventable causes of death may be eliminated and human lives lengthened.
2. That the various public health agencies—national, state and municipal—and the various private agencies for the prevention of disease may know the number of deaths that occur and thereby may operate intelligently.
3. That these agencies may determine what part of our mortality is preventable and when and where preventable deaths occur.
4. That pestilential and epidemic diseases may be detected promptly.
5. That we may apply our remarkable scientific knowledge of disease prevention intelligently at the time and in the place where such application is most needed.
6. That the success or failure of all measures attempted in the prevention of disease may be accurately determined.
7. That individual cities and localities may learn their own health condition by comparison with the conditions of other communities and determine thereby the wise course of public health activity.

8. That home-seekers and immigrants may be guided in the selection of safe and healthful homes by accurate information rather than by misstatement of interested persons.

9. That life insurance companies may be enabled to engage intelligently in movements to protect their policyholders from death and suffering due to preventable diseases and accidents.

10. That the settlement of estates and matters of inheritance, pensions, etc., may be definitely settled by official record of death instead of on the memory of interested witnesses.

WHY REGISTER BIRTHS?

1. That the birth, date of birth, parentage and other essential information for government and identification purposes may be made a matter of official record.

2. That the ages of school children may be definitely known, making the proper enforcement of school laws possible.

3. That the laws affecting child labor may be effective and the children of the poor thereby protected.

4. That labor may become safer by the elimination of children under legal age from all hazardous occupations.

5. That the law abiding employers of youth may be protected.

6. That prosecutions dealing with "age of consent" may be settled by record and not by conjecture.

7. That litigation in matters of inheritance and settlement of estates may be simplified by the definite knowledge of the ages of all persons concerned.

8. That the American-born children of foreign-born parents may have indisputable evidence of American birth which will protect them from enforced military service when visiting the mother country of the parents.

9. That blindness may be prevented by prompt medical attention to the infected eyes of the new-born.

10. That infection and mortality among women may be prevented and that young babies may be saved by immediate attention by existing agencies for the relief of the poor.

11. That the Children's Bureau of the United States government may become effective and may carry out the duties imposed upon it by congress.

12. That the millions of dollars, from public and private sources dedicated to the protection of infants and the welfare of the young and the development of the race may be wisely and intelligently employed.—*From Bulletin of The Association of Life Insurance Presidents.*

"UNDESIRABLE TERMS."

Of the hundreds of death certificates handled annually by the Wisconsin State Board of Health in making its classification of diseases,

many, as filled out by local physicians, contain unusual comment as to the cause of death. Some of these follow:

"A mother "died in infancy."

"Went to bed feeling well, but woke up dead."

"Died suddenly at the age of 103. To this time he bid fair to reach a ripe old age."

"Do not know cause of death, but patient fully recovered from last illness."

"Deceased had never been fatally sick."

"Died suddenly, nothing serious."

"Pulmonary hemorrhage—sudden death." (Duration four years.)

"Kick by horse shod on left kidney."

"Deceased died from blood-poison, caused by a broken ankle, which is remarkable, as his automobile struck him between the lamp and the radiator."—*Oskaloosa (Iowa) Herald.*

BIRTH REGISTRATION NECESSARY.

The work of the State Board of Health and City Health Department in securing for future use a perfect registration of all births, will be of great benefit to the State Labor Inspector. The Woman's Clubs of the State have now taken up the question and an educational campaign will be commenced at once. A bill will be prepared and presented at the next session of the Legislature requiring a registration of births in all the counties.

In issuing employment certificates as required by the new Child Labor Law, it will be difficult for the State Labor Inspector to obtain the exact age of the child on account of the absence of any vital statistics of birth registration. Until a law is passed requiring the issuance of birth statistics the Labor Inspector will be somewhat handicapped in the issuance of employment certificates, and will have to depend upon either the parent or guardian of the child or the school record of the child furnished by the teacher or principal.

The employment certificate is a method both of opening the doors of industry to the child, and of protecting his life, health and morals during his earlier years of work. Great care will be taken to obtain the correct age of the child, together with the educational qualifications for one of his age, and if it is not found to come up to the average an employment certificate should not be issued. Of course, the question of the dependent parent and the proper support of the child by being taken from employment will have to be considered, as the State Labor Inspector will have to use judgment in determining the dependence so that no hardship will be placed upon the family.

While it will be several years before the collection of statistics on birth could be used to advantage by the Labor Inspector, the registration should be commenced as early as possible.

The Children's Bureau bill that passed Congress last year required a collection of statistics on infant mortality, the birth rate, accidents and diseases of children, and the number of children employed, but the short time that the law has been operative no statistics have been obtained, and no effort made to secure a birth registration, so it seems that this important question in child welfare work will have to be accomplished by legislation in the various States.—*Florida Metropolis.*

P.H.R.



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City Hall, Pensacola.

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When giving change of address, give both the old and the new.

Anything you want to know about the public health we will try to tell you. Any information you want about communicable diseases of domestic animals we will help you to get.

Address communications to Jacksonville, Fla.

In order to improve the race, the parents should be cleanly wed and the children nobly bred, wisely fed and firmly led.—Hon. John Burns, in Quarterly Bulletin of West Virginia State Board of Health, January, 1914.

Too many

SOME HINTS IN SANITARY PRECEPTS.

A suggestion to improve conditions, whether in business, for comfort, or for healthful living, must have a ring of practical utility to make any impression or invite encouragement to the scheme from listener or reader. Theories and suppositions and abstruse speculations find no favor nor command interest now-a-days among the common run of people as we find them. The invariable query to every proposition is, "Is it feasible to do this? Can this movement be practically applied in every day life?" Now, in health matters hygiene and sanitation, the one being usually directed to individual health and the other to the health of the public, are not exceptions to the general rule of sceptical inquiry. It is unfortunately too true that the popular belief concerning these subjects is that they are patent right affairs solely for delectation of the medical profession and, like the sanctum sanctorum of the ancient religious ceremonies, must not be intruded upon nor invaded by any other than the disciples of the mythical Esculapius.

There is nothing mysterious about cleanliness, and cleanliness is the basic principle of sanitation. Neither is it difficult to understand why to be clean enhances comfort and improves health. A child can understand this, for it is a fact admitting of no dispute or argument. Now, it is the practical application of this knowledge which may be said to be hard sense—horse sense if you will—that the NOTES invites attention to and asks every reader to think about.

The housekeeper can give an impulse to practical sanitation by seeing that carpets are kept swept, that dust is mopped up with a damp cloth and not scattered by a feather duster to again settle in other spots; that pitchers and slop bowls in the spare chambers are kept empty until guests arrive and the room is needed, so that the pesky mosquito may not have an opportunity to increase by laying eggs, for every one knows or should know that mosquitoes only lay eggs in water and hatch out in water; that the refrigerator is scrubbed out at least three times a week and daily, if possible, using hot water and soap to do the cleaning; that milk, fish, meats and vegetables are not kept together in the same compartment in the refrigerator, and that milk is always stored in tightly fitting stoppered bottles. These are some of the little sanitary practices which the mother and housekeeper can find of practical benefit and for which no medical man need be consulted. Of course everybody knows all this, but isn't it strange that so many people are found who neglect to put into practice what they know?

The man of the house—the head of the family—can also find many things pertaining to practical sanitation which he can successfully do about the yard and premises and with little trouble. Keep the weeds down because they are unsightly and afford a very favorable hiding place for all sorts of filth. Rake out and cart away every old tin can and pail. Caution the servants and see that they do not leave tubs with water standing for days, and that duck ponds are emptied every day or two, and that ornamental fountains are likewise

attended to, or are stocked with minnows. All of these measures are obviously to prevent mosquito breeding, and mosquito breeding may possibly propagate either the *Anopheles* or the *Stegomyia* and if a case of malaria or yellow fever chances your way, mosquito breeding of either of these varieties would certainly give trouble.

The man of the house can also direct his attention to suppressing the fly nuisance. How? By personally seeing to it that the stable is kept clean, manure heaps screened, and if not screened then covered liberally with lime to several inches. Flies breed in horse manure; lay their eggs there. Do you know that? Therefore, if the fly eggs are killed as soon as laid, the quantities of flies will be daily lessened until the nuisance is corrected entirely. This is easy to practice and attention to this small feature of cleanliness constitutes another factor in practical sanitation.

In places where there is no sewerage system and surface closets—privies—are used, these domestic necessities should be screened against fly entrance, and daily attention paid to the excreta lest it become a nuisance. The system is disgusting enough anyway, but the neglect which attends these receptacles in many of our inland towns is well calculated to drive visitors away, especially those transients who come from portions of the country provided with a water carriage system for disposal of domestic waste. A mixture of lime and dry earth can be kept in each building of this character with printed request that a scoop full shall be thrown into the pail after every evacuation; then frequently cleaning of the ground surface, and taking away. Where? At a distance from human habitation, unless a cremation furnace is handy, and then by all means destroy this filthy mass by burning. Remember this and don't forget it. Flies carry typhoid fever germs on their feet and on their mouths.

If typhoid fever lurks in a community and the source of infection can not be traced, then by boiling all drinking water a possible means of introduction of the germ into the human system will be prevented. Here again is found a practical application of a sanitary caution and forethought, against disease introduction.

The NOTES does not propose to write treatises on sanitary subjects but to throw out hints—food for thought as it were. The NOTES hopes that it may induce many to think and that practical results will follow. Sanitation in practice is what the State needs, and the average citizen can, if he or she will, find plenty of useful applications of sanitary principles if an eye is only cast about to find them, and will exercise his or her common sense in carrying out such thoughts.

DIRTY PEOPLE AND DIRTY TOWNS.

In the "Press Service" of the State Board of Health, March 18th, the subject of "Dirt and Health" was discussed, which the NOTES hopes the reading public of Florida has read. The following, taken from the *Bulletin of the Indiana State Board of Health*, supports the

contention already made, and is commended to every person who is interested in bettering health conditions everywhere:

"The reason we have so many dirty towns is because there are so many dirty people. Some towns stink, but in such the inhabitants stink first. No town is in itself bad; it is the people who are bad. The town is a mirror. It reflects the people. A man who is clean in mind will be clean in person; he will have a clean front yard and a clean back yard.

"A littered dooryard and a dilapidated house reflect a littered and dilapidated mind.

"If an overrunning outhouse borders the alley, it is because the instinct of decency and cleanliness is woefully absent in the owner or tenant, or both. The old proverb, "Cleanliness is next to godliness," was changed by Governor Thomas Marshall to "Cleanliness is essential to godliness." No cleanliness, then, of course, no godliness. A dirty town is an ungodly town.

"Some towns, yes, many towns, have flies on them. They have flies on them because they are dirty. They are ungodly for that very reason.

"A town may have several churches and many church-going people, but if it is dirty and stinks it is ungodly. "By their works ye shall know them." Of course; how else can they be known? I sat on the porch of a house in a certain town one summer evening. It was hot and sultry. Every once in a while a gentle movement of the air would bear foul odors to my nose. It was the nearby outhouses I smelled. What kind of people are they who have such surroundings? Are they strong-minded and clean? Think of people so disposing of their sewage as to poison the air and also make it possible for flies to transport unspeakable filth to their food. Why shouldn't such people have typhoid fever? They invite it, don't they? Surely, every man is the architect of his own misfortunes. Foul outhouses and flies spell typhoid. Why have them? The answer is simple. They who have them are not of a high order of mentality. They are weak in righteousness and impractical.

"Shall the dirty be compelled by law to be clean? No, indeed; not unless their dirtiness threatens the health and comfort of others. The Scripture says: "He who is filthy let him be filthy still." Of course; what is the use to do otherwise? Compelling "he who is filthy" to be clean in person and premises will not make him clean in mind and soul. He'll be filthy still. We must teach cleanliness to the unclean. Then if they become clean and stay clean, it is because cleanliness is in their nature. If they stay dirty, it is because they are inherently dirty. Force won't change them. The reason we can not make a silk purse out of a sow's ear is because it is a sow's ear. It is not silk. A naturally dirty man can not be made into a clean man. It is because he is a dirty man. It is an iron law of nature that only those may be saved who can accomplish their own salvation. Dirty towns will exist just as long as dirty people exist. Dirty towns will disappear when clean people predominate. A slow town will always have flies on it."

THE FIGHT FOR LIFE.

How shall we treat tuberculosis?

"Two things are of prime importance in the ideal treatment; one is the care of the patient himself, the other is the protection of those who have charge of the patient, for the disease is communicable and is easily transmitted through the characteristic germs.

When tuberculosis is mentioned, one variety of the disease comes first to the mind unless it is otherwise specified—that of pulmonary consumption, in which the lung cells are involved. Probably this is the most easily communicated and the most dangerous to the home and the community. And it is this variety that is under consideration here.

It has been proved by long experience that out-of-door life is the best preventive and, where not too late, the surest cure for the disease, in which the patient may breathe, sleeping or walking, an abundance of fresh, clean air, for that medicine is most destructive to the germs of consumption. The fact has been the important reason why Florida and the South have attracted such numbers of tubercular patients from other sections of the country—the milder climate has made out-of-door living more endurable and delightful in every season of the year.

As the value of the open air treatment has been more and more impressed upon the medical men of the country, the treatment of tuberculosis in sanitaria has seemed to lose in favor. The disadvantages of the latter, which are offset by the former, are several.

No building, however well ventilated, can have such an unfailing supply of pure air as nature furnishes where the sky is the only roof. However complete may be the provisions for destroying and for preventing the transmission of the bacilli of tuberculosis, no sanitarium can be so well equipped as the laboratory of the great out-of-doors.

The close association of several or many invalids or semi-invalids in a hospital increases the danger of infection, or of reinfection. More than that, the influence of such intimate association is depressing mentally, where a comparing of symptoms and a frequent and almost constant discussion of experiences is possible. And cheerful surroundings and thoughts are no small element in the successful treatment of this, as well as of other diseases. The separation, necessary in the sanitarium methods of treatment, from home ties and interests and friends, is hardly less detrimental to the patient's progress and welfare.

A realization of these conditions has halted the erection of a great sanitarium for tubercular diseases in one Northern State and the movement is more likely than not to extend to other sections of the country.

There can be no question that the South is better adapted to the rational treatment of this disease than are the colder parts of the United States. Is it not sensible, then, that this southern section should devise some plan to meet these conditions, at least for the care and the possible cure of its own consumptives?

Its State Board of Health has under consideration a plan which is comprehensive and should be practical and effective. The idea which

may be developed by experience to greater usefulness, contemplates the division of the State into sections, whose size shall be determined largely by population. Each division is to be under the immediate direction of a superintendent or nurse, whose duty shall be to know how many consumptives are in his division, to have as intimate an acquaintance as possible with each case, and wherever permissible, to advise with each, or with his family and friends for the proper care both of the patient and of those who may be exposed to the infection by home conditions and relationship.

It is one of the dangers of the disease that its very danger to those who are associated with it is not appreciated. Carelessness or indifference is a serious menace.

Still another danger is that the disease may be communicated long before the patient reaches the more manifest development stage, possibly even before the real nature of the disease is fully realized. The skilled and trained nurse would have a usefulness beyond estimating in educating the community to these very simple but very important facts.

The plan suggested to the State Board of Health includes a simplification of treatment methods which places it within the reach of all, even though their means be meager. By this the tubercular patient would be made to live an out-of-doors life in every month of the year, sleeping in a tent or in a screened and roofed frame room of substantial construction, but open always and in every direction to the air. This building might be located in the yard surrounding the home, if space permitted, but far enough removed from it to prevent its possible infection.

The patient would be encouraged to have regular and engrossing physical occupation, so far as his strength permitted, which would keep him in the open air and would divert his mind from himself and his troubles. Such a method of treatment would not necessarily separate him from his family, but would give him the benefit of their care and attention and sympathy, to say nothing of nourishing food from the home kitchen. At the same time, the segregation from them in the actual living conditions, would reduce to a minimum the danger to them.

The danger of this insidious disease to the community and to the State has long been known, but only partially realized. Its control and treatment have been worked out by the medical profession and by private individuals in the erection of sanitariums, many of them failing to realize in their construction the essential and peculiar characteristics of the disease. It is because of its danger to the community at large that the State formerly assumed to control yellow fever when that pestilence made its appearance in Florida. Yet tuberculosis — pulmonary consumption — claims its victims by the score today where yellow fever took one.

Will the people of Florida actively support their health officers in this fight against tuberculosis?—*Press Service, State Board of Health.*

WHAT ARE GERMS AND WHAT DO THEY DO?

The following article, by Dr. Alvah H. Doty, director of the Medical Department of the Western Union Telegraph Company, gives such a clear and interesting description of what germs are and what they do, that it is reproduced here. It is a clear-cut exponent of the subject, and divested of technical terms, the story of germs is entertainingly told by Dr. Doty in such language as can be well understood by the general reading public:

"As early as the seventeenth century various investigators had observed, with the aid of the weak and imperfect magnifying glasses of the period, that both solids and fluids contained very small living bodies, which were seen to move about in the field of vision. As these glasses gained power through more skillful grinding smaller objects were revealed, until the microscope of today is able to detect the most minute living organisms, some of which, although not more than $\frac{1}{50,000}$ of an inch in size, are brought clearly into view and easily studied. These little bodies are known as microorganisms, or by the more common and well known name of 'bacteria.'

"Although some of the larger of these bodies were early recognized by investigators, they remained for a long time chiefly a matter of curiosity before an effort was made to study or classify them; this however, gradually took place, and bacteriology, which treats of the subject, now plays an exceedingly important part in the prevention and cure of disease.

"Even long ago it was suggested that these minute living bodies were in some way connected with the transmission of disease, although but little satisfactory or definite knowledge was secured in this direction until about 1880, when Pasteur and Koch, respectively a French and German bacteriologist, working independently of each other, presented to the world conclusive evidence of the germ origin of disease. Since that period bacteriology has made rapid strides and laboratories throughout the world are carrying on most important and exhaustive investigations regarding the subject.

"Bacteria are now not only classified, but each one discovered has been carefully studied as to its special habits and characteristics, the conditions under which it thrives best, and the agents which are destructive to it; in this way means have been found to render them far less dangerous.

"Bacteria are divided into three groups, according to their shape. Those which are round are known as 'cocci,' those which are long or rod shaped as 'bacilli,' and the curved or spiral ones are called 'spirilla.' These groups do not change from one shape to another, although the individuals of the different groups have certain peculiarities by which they may be identified from others of the same group, and bacteriologists must be familiar with this condition in order that they may be able to positively identify them as the cause of certain diseases.

"As an illustration, it may be said that the round bacteria, or 'cocci,' are found in pneumonia, and meningitis. The long or rod shaped bacteria, or 'bacilli' are found in typhoid fever and tuberculosis; the

curved or twisted bacteria, known as 'spirilla,' are found in cholera. While it is often difficult to promptly separate the germs of each group from each other, continued improvement in the power of the microscope and the more effective means of staining the germs in order that they may be more easily detected has gone far to remove the difficulties connected with this work. This is very important, as the identification of numerous diseases now depends almost entirely upon bacteriological examination. It is by this means we hope to go far towards the elimination of some of the infectious diseases, *i. e.*, by their early detection, isolation of the patient, disinfection, etc.

"Very important advances have been made in connection with the subject of bacteria relative to the results which follow the introduction of these germs into the system, the manner in which they cause disease, and what becomes of them.

"When we consider the enormous number of bacteria which may enter the system at any one time and the rapidity with which they multiply, for in some instances they double in number every twenty minutes or half hour, it is a surprise that we ever escape serious results after infection has occurred. However, we have more recently obtained definite knowledge relating to this subject which shows how we are protected against this danger by the powerful antagonism which exists in certain constituents of the blood, and even the tissues of the body, to the action of these germs. While this protection is not by any means always sufficient to overcome the injury produced by the invasion of bacteria, the fact that recovery so often occurs is due largely to the resistance just referred to.

"In the blood are found little round microscopic bodies known as leucocytes, the function of which for a long time was in doubt; we now know that in addition to whatever else they may do they are germ destroyers and with the aid of the microscope we can see bacteria drawn within the leucocytes and destroyed.

"It is not the mere presence of the bacteria within the body which is responsible for the danger which often follows their invasion; this is more directly due to the fact that the bacteria give off a poisonous product known as 'toxin,' which may be regarded as the dangerous factor in connection with this condition. The presence of this poison stimulates the blood of the one affected to produce an antagonist known as 'antitoxin,' to overcome or neutralize the toxin, therefore both the blood itself and the leucocytes which it contains are agents of protection.

"It was believed by the investigators who early studied this subject that if an antitoxin of this character could be prepared in large quantities outside of the human body and promptly introduced into it in a considerable amount when infectious diseases occur, to aid the antitoxin already formed in the blood of the person affected, it would go far to render the disease mild; or if injected in a person who had been simply exposed it would probably render them immune, or prevent the appearance of the disease.

"In the investigation of this subject it was shown that some animals, particularly the horse, are not very susceptible to the action of certain

infectious germs which are commonly dangerous to the human being. This formed the basis of most exhaustive experimental work along these lines, and proved if certain germs affecting the human being are injected into the circulation of the horse it at once stimulates the production of antitoxin in comparatively large quantities. If afterwards the fluid part of the blood or serum containing the antitoxin is withdrawn from the horse under treatment, by opening a vein, and then freed from possible contamination, it may be bottled, sealed and made ready for use in the human being under the name of antitoxin or serum treatment.

"Experimental work has largely defined the amount of antitoxin necessary to combat the germs which may have entered the system or to prevent the disease in those who have not already become infected; furthermore, it has been shown that if the use of the antitoxin is delayed until the disease has progressed for some time, it is of little or no value.

"As each form of bacteria probably produces its own peculiar toxin or poison, it naturally follows that a special antitoxin is preferable for each disease; for instance, to secure a diphtheria antitoxin, horses are injected with the diphtheria bacilli or their products.

"Antitoxins have not been prepared for all infectious diseases, for the germs of some of them have not yet been discovered, besides successful results in this direction can not always be obtained even in diseases where the specific organism has been identified. Theoretically it may not seem difficult to obtain by the means already referred to an efficient antitoxin in instances where the germ of the disease has been found, yet there are many practical difficulties which renders this often difficult, if not impossible.

"The diphtheria antitoxin is probably the most successful and the one most commonly employed. It is used both to immunize persons who have been exposed, and in this way to prevent the occurrence of the disease, and also render it mild or less dangerous in instances where a person has become infected. There is no doubt as to its value, and while successful results have also been secured with other forms of antitoxin or serum, this treatment is yet in its early stage, and there are many questions connected with the subject which are yet to be settled.

"The above information is presented not only as a short account of the different forms of bacteria and their action upon the human system and the protection the body affords in dealing with these organisms and the theory of the serum or antitoxin treatment, but also to warn against the indiscriminate use of these agents in the hands of unscrupulous or incompetent persons who often suggest this form of treatment to mask the use of worthless and dangerous products. This occurs particularly in connection with tuberculosis. *There is no serum, antitoxin or vaccine yet produced which is of any practical value in the treatment of this disease,* and any agent advertised for this purpose should be carefully avoided; besides, any form of antitoxin treatment should be accepted only upon the recommendation of a reputable physician who is competent to decide when this remedy

should be used and where a safe and proper supply can be obtained.

"While this article has dealt with what are known as 'pathogenic' organism, *i. e.*, those which produce infectious diseases, the greater number of germs with which we constantly come in contact are not of this order, but are as a rule harmless, and in some instances necessary to our well being.

"In conclusion it must be said that we can go far to aid in our individual protection against danger of infection by maintaining good health, for in this way the blood and the tissue of the body are far better enabled to deal with invading bacteria."

APPROVAL FROM THE FAR WEST.

MINNEAPOLIS, MINN., March 10, 1914.

DEAR DR. PORTER—I thank you for the press article which you released March 11th. I am somewhat a crank along ethical lines, having devoted a good portion of my three score years to study and investigation.

I am simply amazed at the indifference of the general public to the subject. The government has spent many millions to give us better poultry, sheep and swine, but has scarcely given a thought to the most important animal that we raise. The result is that ninety per cent of the two-legged animals that pass any given point on our streets in an hour, are scrubs—mental and moral scrubs. Like Topsie in the famous or infamous story of Mrs. Stowe, they simply "growed."

A still more amazing thing is that when a little bunch of evolved humans urge steps to improve the race—so called thinking men rush into print declaring that eugenic laws are a "joke."

We can only educate people up on this point the same as you gentlemen have done in the matter of flies and mosquitoes. It is a slow, thankless job, and about all the credit one can receive is the personal consciousness that he is doing something which will merit the gratitude of the coming years. More power to you.

Very truly yours, W. W. COOLEY.

THE REPORTING OF COMMUNICABLE AND PREVENTABLE DISEASE.

At this time there is much interest in the cities of the State in having diseases properly and promptly reported, and a number of these cities are about to amend or pass new health ordinances covering this and other necessary points.

Regarding morbidity reports the last words are those of Assistant Surgeon General Rucker of the United States Public Health Service in his address on "Public Health Administration," read before the Federation of State Medical Boards meeting, February 25, 1914, and published in the March 6, 1914, issue of *Public Health Reports*.

He says: "In the great mass of sanitary legislation at present to be found on our statute books there is one notable omission. Few of

the States have an efficient law for the collection of morbidity statistics. We have been marvelously illogical with regard to our vital statistics. We have collected data upon births, marriages, and deaths; none of which conditions is particularly dangerous to the public health, and have almost entirely lost sight of the sick man, who is the point from which most human diseases are disseminated. Once a person is dead, his dangerousness is lost, and so far as practical public health work is concerned he is an almost negligible factor. It is the living carrier of disease which is dangerous. Morbidity reports, particularly of the communicable diseases, show the location of cases which constitute foci from which disease may be spread to the well. The collection of morbidity reports thus makes it possible to know where to take the proper precautions for the protection of persons who may be exposed to a given disease, and therefore acts as a prophylactic measure for the community at large. This has an intensely practical bearing, because it not only makes it possible to prevent the spread of disease, but also enables this to be done at the minimum expense and with the minimum of effort. This is efficiency in its highest phase. There is also a humanitarian aspect of the question. The knowledge of the occurrence of disease makes it possible to see that the sick receive proper treatment, not only from a preventive but also from a curative standpoint. Still another benefit accrues, particularly with regard to the diseases which are strictly environmental in character, as for example, industrial diseases. The knowledge, for example, of the occurrence of a large number of cases of lead poisoning in a given factory points to the necessity for taking steps toward the protection of the health of the operatives there.

"From the research aspect the collection of morbidity statistics is extremely important, because it enables careful study of the epidemiology of disease, and affords an opportunity of gaining increased information relative to its means of spread.

"Morbidity statistics, from an administrative point of view, are of value to the local health officer in that they give him the knowledge upon which to undertake operations for the prevention of the spread of disease in his particular locality. The State health officer is able to apply this knowledge in controlling the extension of disease from the infected locality to the State at large, and he finds that unless he has an accurate knowledge of the occurrence of disease within his jurisdiction, the most important functions of his office are seriously handicapped. The United States government, in its work of preventing the interstate spread of disease, finds that morbidity information is absolutely essential. The question has even an international aspect, because one nation can not prevent the importation of disease from another without serious detriment to commerce unless it have precise information as to the international geographic distribution of sickness.

"The collection of morbidity statistics requires first of all a proper legal backing. This means the enactment of a well-thought-out law. A model measure of this kind was adopted by the annual conference of State health authorities, with the surgeon general of the United

States Public Health Service, at Minneapolis in 1913, and an attempt is being made to secure the passage of this law by the various State legislatures. The next thing which is necessary in collecting morbidity statistics is co-operation. This co-operation begins with the practicing physician. The law, of course, provides a penalty for infraction, but no penalty, no matter how severe, will make physicians report all their cases unless they earnestly desire to co-operate with the health officer in the prevention of the spread of disease. Every practicing physician of intelligence realizes that if he fails to do his duty in this regard he not only endangers the health of his patients and their families, but also that of the community at large. It is doubtful if any good doctor wants to assume the responsibility for neglecting to report his cases of communicable disease. Such an action would be in violation of the spirit of his ethical code and would reflect upon the integrity of his citizenship. He must co-operate with the health officer and the health officer must co-operate with him. This requires tact and a certain amount of charity. Above all, a spirit of co-operation is essential.

"When physicians fail to report cases of communicable disease it is the result of ignorance, carelessness, or a desire to protect the interests of their patients. They would not be imbued by the latter desire if the general public were in thorough accord with the spirit of preventive medicine. It seems to the practical health administrator as though the most important single thing which should be taught in the campaign of public health education which is now going on would be the necessity for making prompt and accurate morbidity reports. In this connection it may be pointed out that if the measures of quarantine, disinfection, and placarding are applied by the health officer with tact and charity much of the public opposition to reports of sickness would vanish."

The State Board of Health of Florida has been given a supply of the Model Law for Morbidity Reports above referred to, and will be glad to send copies to any interested and requesting. It will serve with slight alterations, and possibly the present omission of certain of the notifiable diseases, as the best basis for drafting a municipal ordinance on this subject.

THE MIDWIFE AND INFANT MORTALITY.

Since the issuing of the Press Bulletin *Legalizing Crime in Florida*, which was afterwards printed in January HEALTH NOTES, the city of Jacksonville has inaugurated her plan of regulating midwives by the passing of an ordinance governing the practice of midwifery.

This provides that after April 1st next no one will be allowed to practice midwifery until having passed a satisfactory examination in its elemental principles and received from the city board of health a certificate which may be revoked for good cause if the holder is shown to be an unsuitable person to engage in such practice.

The ordinance, which was most carefully drawn and considered by both medical and legal advisers, defines midwifery as "the offering

or undertaking by any person to assist for a compensation of any kind a woman in normal child-birth, but it does not include at any child-birth the use of any instruments, nor the assisting of childbirth by any artificial, forcible or mechanical means, nor the performance of any version, nor the removal of adherent placenta, nor the administering, prescribing, advising or employing in childbirth of any drug other than a disinfectant. This ordinance shall not be construed as applying to any practitioner of medicine authorized to practice medicine under the laws of the State of Florida, nor shall it authorize any midwife to practice medicine." This last clause is only a statement of the present State statute which exempts "females, who follow the practice of midwifery strictly as such" from the requirements of the law as to medical practitioners.

That the new regulation should work no undue hardship upon the midwives now practicing or upon future applicants, it was made the duty of the city board of health to provide free instruction in the simple principles of the practice, and specifies that no test of literacy or education shall form part of the examination.

There is little or no opposition by the midwives to the plan and a large number have attended the instructions, of whom it is expected sixty to seventy-five, all but ten or fifteen colored, will take the examination about April 1st.

Just how much effect these regulations will have in reducing the future infant death and sickness rates is, of course, speculative, but that they will be lowered can not be doubted when it is known that in Jacksonville last year 849 of the 1,632 reported live births were attended by midwives, and of the 191 still births reported only 72 were by physicians, and that of the 180 deaths of infants under one year old, 47 were attended from birth to death by midwives; that of the 13 deaths under one year known to be caused by lockjaw of the new born, 11 were attended at birth by midwives, and that during the year there were reported by nurses 11 cases, all among colored infants, of ophthalmia neonatorum (inflammation of the eyes of new born).

If ophthalmia neonatorum and tetanus neonatorum (lockjaw of the new born) are made reportable diseases, as provided by the Model Morbidity Law, midwives should have these diseases explained and informed how to prevent them, and the necessity of reporting them, and the doctors must give this information. This is but the beginning of the work that must be taken up to save the eyes, health and lives of helpless infants entrusted to the care of these women, who seem a necessary evil in this State.

Until the State undertakes the regulation of midwifery, it is strongly suggested that cities follow the lead of Jacksonville and pass ordinances, if not at present to the extent of instructing and examining midwives, at least to provide for their registration. Such an ordinance should give the definition of midwifery, and impose a fine and imprisonment for practicing without registration, and also provide that for good cause the right of any unsuitable person to practice may be revoked.

The imposition of a small occupation tax, merely enough to prevent registration of a large number who probably would take occasional cases only, is also suggested as a wise provision.

The State Board of Health will be glad to send a copy of the Jacksonville ordinance to any city wishing it, and offers its help in drafting a similar ordinance suitable to the local conditions in any community if thoroughly informed of the local status.

A DISCUSSION OF THE REASONS FOR AND THE VALUE OF THE REGISTRATION OF VITAL STATISTICS.

(Extracts from a pamphlet by Dr. Frederick V. Beitel, Chief of Bureau of Vital Statistics, Maryland State Board of Health.)

Statistics is defined by Webster as "The Science which has to do with the collection of certain facts respecting the condition of people in a State." The origin of the term "from the State" indicates the real importance of the registration of vital statistics in the science of politics, and governmental science has for its basis the proper collection and compilation of statistics.

The representative of the German government, which we all concede to be one of the best regulated governments on the globe, states that the mortality statistics of the German Empire constitute the basis of public as well as private action for the protection of health, and every fact learned concerning the causes which prevent premature death assists in prolonging the working powers of the individual and promotes the general welfare of the nation.

The above statement has the same application to the State, to each county within the State and to each individual within the county, as it does to the nation as a whole.

This great branch of governmental science has been neglected to a great degree in Maryland year after year, leaving the records of health conditions as well as permanent legal records of the births and deaths of our ancestry a question. Except for an occasional article, written very often by a biased mind, or the old family bible, the existence of which eventually comes to an end, there is little record of the health conditions of our State or the date of birth of our ancestry, to be relied upon.

To give in brief a summary for the need of registration of birth to the average citizen, we might begin with, first:

1. To establish identity.
2. To establish the right to inheritance.
3. To establish the right to vote.
4. To establish legitimacy.
5. To establish the right to enter public schools.
6. To qualify for civil service examination or to enter the army or navy.
7. To recover pension claims.
8. To hold title and to buy or sell real estate.

9. To be eligible to the general assembly of Maryland, the house of representatives or United States senate.

10. To be eligible to the office of governor of Maryland or president of the United States.

11. To claim and establish immunity from the consequences of certain criminal offenses.

12. To be competent to testify in certain cases.

Besides the purely personal element in the registration of births and deaths we must consider the importance of such registration to the State, for instance; the vital questions such as the actual increase of births over deaths in the State, the influence of various trades, occupations and dwelling places upon the health and vigor of individuals, the facts concerning the health and vigor of the State as a whole as well as its various communities, to obtain the various causes of death, tabulate them and know where and when to apply the proper hygienic measures for the prevention, to measure the degree of efficiency of various health measures and to learn the average duration of life.

There is hardly a relation of life from the cradle to the grave in which the evidence furnished by an accurate registration of births may not prove to be of the greatest value.

As the State becomes more densely settled and the struggle for existence more strenuous, many of these matters which have hitherto been of no great importance will take on a deeper meaning and acquire greater importance. The private interests of the citizen in the registration of births is all important. A great proportion of his rights and duties turn upon the question of his age and his parentage which are both definitely conserved by the registration of his birth.

Personal reasons for collecting statistics regarding deaths are numerous, their significance to the State as a whole overshadows the personal interest which they may have. Nevertheless, from the standpoint of the individual, the registration of deaths is valuable.

1. Because it is the only legal repository for such records afforded by law.

2. The same law compels all information to be correct and provides heavy penalties for false information.

3. A certified copy of any certificate of death can always be obtained by application to the State Registrar of Vital Statistics.

4. It will enable you or your children to recover claims of insurance, inheritance, etc.

5. It prevents or aids in the detection of homicide and the illegal disposition of dead bodies.

6. It prevents the spread of contagious diseases from dead bodies.

Very few of us have ever thought how soon all authentic information regarding the age, birthplace, parentage, etc., of our deceased relatives is forgotten. As a matter of fact, unless we have some obscure, or perhaps nearly forgotten family record, it would, indeed, be a task to obtain any information which approached the truth. Think now of the opportunity offered you by the State by virtue of which

you will be enabled to have the record of the death of any of the members of your family recorded at the office of the State Registrar of Vital Statistics, this original record, signed by the physician last in attendance, being kept on file as a permanent legal record which may be referred to thirty or sixty or eighty years hence. It is a matter of no little importance and really is of more value to widows and orphans than anyone else to be able to procure a certified copy of a certificate of death in order to obtain claims of insurance, inheritance, pension, etc.

To sum up, then, the advantages of registration. It insures every man the record of his life to which he is entitled, it expedites his title to his property, protects his estate and his family. It places Maryland in her proper relation to other States, makes her contribute her share to the general information of the people, it lessens the tangles of the law and aids the prosecution of the criminal. It gives a stable basis for health work, provides an audit of the books of life, makes less difficult the warfare against preventable disease and gauges the success of the campaign against those particular foes of human life from whose ravages Maryland suffers. Taking these advantages as a whole and viewing them in their proper light, they render the vital statistics law, if properly administered, as fruitful of good to the people of the State as any statute enacted in recent years. Indeed, if the value of the law in this State be measured by the success of like statutes in other American States, it may rank with the most beneficial legislation of the day.

THE BIRTH OF VITAL STATISTICS IN SOUTH CAROLINA.

South Carolina is no longer a dark spot on the map because of having no law for registration of births and deaths.

The legislature just ended has given her a broad and flexible statute empowering the State Board of Health to establish a Bureau of Vital Statistics with the Secretary of the Board as State Registrar, and to make and enforce rules and regulations for the recording of these vital facts from and after July 1, 1914.

The new law is practically that of Mississippi, where the rules and regulations adopted were the provisions, almost word for word, of the model law, and it is to be presumed and hoped that South Carolina will follow the same course.

This leaves only Georgia among the Southeastern States without some law for the gathering of the necessary data to prove the healthfulness of this section of the country.

Dr. Oscar Dowling, President of the State Board of Health of Louisiana, speaking for that State, says reliable figures are needed because " * * * a naturally healthful environment has been misrepresented and maligned, due in part to former epidemics of yellow fever and in part to a mistaken notion as to our swamp areas. From personal investigation and observation of conditions in every parish in the State, the conclusion is warranted that the healthfulness of this

region is unsurpassed. Climatic conditions, water, variety of food products, and nature's enticement to open air activities make for physical vigor and consequent longevity. But to prove these facts and, in addition, our relatively great immunity from many diseases, accurate, specific records are essential." These words are just as strongly applicable to Georgia, Florida, Alabama and Mississippi as to the State to which they were directly applied.

This action of South Carolina should spur all those interested in Florida's registration to renewed efforts, and give hope that at the next session of her legislature some similar law can be passed here.

REGISTER ALL BIRTHS AND DEATHS IN YOUR FAMILY.

The State of Florida does not wish the name and life-history of a single one of her citizens to perish from the earth.

The State has a law which requires every birth and every death to be reported and to be made a matter of permanent legal record.

There is a fine for those who violate the law, but these records are primarily intended for the protection of the individual citizen in his rights.

Without a birth certificate many a man has been denied proof of his right to vote, to hold office, to qualify for important posts or to inherit property.

Without a birth certificate many a child is kept from schools to which it is entitled to go.

Without a birth certificate possible legal tangles as to identity, kinship, etc., are raised.

Every death should be reported to protect the heirs of the man who dies and to show his kinship.

Every death should be reported to prevent suits as to the right to collect life insurance, to inherit property, etc.

Every death should be reported to preserve a correct record of the name, age, birthplace, parentage, etc., of Floridians.

We register our blooded stock — why not register our thoroughbred children?

We are proud of being Floridians — why not prove our title to the name?

**IF A BIRTH OR A DEATH OCCURS IN YOUR FAMILY,
REPORT IT. IF A BIRTH OR DEATH HAS TAKEN PLACE
IN YOUR FAMILY WHICH HAS NOT BEEN REPORTED—
REPORT IT NOW.**

DO NOT LOSE YOUR BIRTHRIGHT AS A FLORIDIAN.—
Acknowledgments to Virginia Health Almanac 1914.

NOTICE OF EMBALMER'S EXAMINATION.

Friday, May 15, 1914, at offices of the State Board of Health, Jacksonville, Florida. Applications for examination must be filed with the State Health Officer at least ten days prior to date of examination, on blanks furnished by this office.

STATISTICS.**SMALLPOX.**

Reported cases of smallpox in Florida, February, by counties (1,223 vaccine points distributed):

Alachua	33
Brevard	1
Citrus	1
Duval	4
Escambia	2
Gadsden	1
Hillsboro	19
Lee	2
Levy	2
Madison	1
Osceola	4
Volusia	33
Walton	1
Total cases, February	104
Total cases, January 1 to March 1, 1914	142

RABIES.

Report of rabies in Florida, February, by counties:

	No. persons treated.
Duval	1
Hillsboro	1
Marion	5
Suwanee	1
Number persons treated, February	8
Total number persons receiving treatment, January 1 to March 1, 1914	18

GLANDERS.

Report of outbreaks by counties, February:

Duval (horses)	2
Hillsboro (horses)	2
Orange(horse)	1
Total cases, February	5
Total cases, January 1 to March 1, 1914	11

HOG CHOLERA (Distribution of Serum).

Amount hog cholera serum distributed, February	79,575 c. c.
Number of hogs for which serum was requested, February	3,035
Total weight of hogs	197,925 pounds.

SPECIMEN EXAMINATION, BACTERIOLOGICAL LABORATORIES.

	Jacksonville	Tampa	Pensacola	Total.
Animal parasites	244	114	23	381
Diphtheria	193	111	12	316
Gonorrhoea	50	33	31	114
Malaria	138	210	15	363
Pathological	9	12	1	22
Rabies	9	2	..	11
Tuberculosis	183	73	28	284
Typhoid fever	99	156	11	266
Water (for sewage contamination)	14	3	..	17
Miscellaneous	32	9	19	60
	971	723	140	1,834

Grand total number specimens examined by State Board of Health Laboratories, February 1,834

DISTRIBUTION OF DISEASES DIAGNOSED IN FEBRUARY.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

—MALARIA—

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Apalachicola	1	..	..	..	..	..	1	..	..	2
Arcadia	1	1	..	..	2
Bartow	3	3
Bowling Green	1	1
Campville	1	..	..	1
Cocoa	1	1
Crescent City	1	..	..	..	1
Daytona	3	..	1	4
Dunnellon	1	1	..	..	..	2
Emporia	1	..	1
Fairfield	1	1
Fernandina	1	..	1
Fort Pierce	6	2	8
Freeport	1	1
Gainesville	3	..	..	2	..	1	..	1	7
Hernando	1	3	4
Holder	1	1
Jacksonville	5	11	..	..	1	2	3	16	33	71
South Jacksonville	1	1	..	..	..	..	1	..	2	5
Key West	1	..	1
Lake Butler	1	..	..	1
Lake City	1	..	1
Lake Worth	1	..	..	1
Largo	1	..	..	..	..	1
Leesburg	1	..	1
Live Oak	1	..	..	..	..	2	..	3
Malone	1	1
Mayo	4	4
Mayport	1	..	..	..	..	..	..	..	..	1
Mandarin	1	..	..	4	5
Mulberry	2	..	..	..	..	1	..	3
New Smyrna	2	..	..	..	..	..	4	4
Orlando	1	4	1	8
Ocala	2	..	..	..	..	..	3	..	..	5
Plant City	1	..	..	..	..	..	..	..	..	1
Palatka	1	1
Pierce	1	..	..	..	..	..	..	..	1
Sanford	1	1
Sarasota	3	..	3
St. Augustine	1	1	2
St. Petersburg	2	..	2
Sebastian	3	3
Tallahassee	1	3	2	6
Trenton	1	..	1	1
Titusville	1	1	..	2
Torrey	1	1
West Palm Beach	1	..	..	1
Williston	4	4
Total	11	20	1	..	5	6	21	45	78	187

REPORT OF TAMPA LABORATORY.

— MALARIA —

Town.

	Diphtheria.	Gonorrhoea.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Tampa	10	11					24			71
Lakeland	1	1					2	11		3
Plant City	1						1	2		2
Webster	1						1	1		1
Release Cultures	22						5			22
Brooksville							1			1
Tarpon Springs							1			1
Safety Harbor							1			1
Fort Myers							1			1
Arcadia							1			1
Bartow							1			1
Nocatee							1			1
Wauchula							3			2
Re-examinations							2			3
Bushnell							1			1
Sarasota							1			1
Total	35	12	0	0	5	1	39	14	11	117

REPORT OF PENSACOLA LABORATORY.

— MALARIA —

Town.

	Diphtheria.	Gonorrhoea.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Pensacola	1	11					2			22
Milton		1					2	2	5	1
Totals	1	12					2	2	5	23

Total cases of principal diseases diagnosed by laboratories of the State Board of Health during February:

	Diph- theria.	Gon- orrhoea.	Malaria.	Typhoid.	Tuber- culosis.	Hook- worm.	Total.
Central Laboratory..	11	20	12	21	45	78	187
Tampa Laboratory...*	35	12	6	39	14	11	117
Pensacola Laboratory	1	12	1	2	2	5	23
Total for State..	47	44	19	62	61	94	327

* Includes 22 release cultures.

P. A. R.



Health Notes



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A careless spitter with a little cough is more dangerous than a careless man with a big revolver!—Health Epigrams, Kansas State Board of Health.

TUBERCULOSIS—ITS PREVENTION AND CURE.

(By Dr. S. R. Mallory Kennedy, Member of the State Board of Health, in
Pensacola Journal, March 29, 1914.)

Have you ever stopped to consider seriously the magnitude of the disease, tuberculosis?

Of course, if you are one of the unfortunates who has contracted this malady, or if you have a child, or some near and dear relative afflicted with this "Great White Plague," you have been compelled to give it serious thought; but have you, strong, healthy man or woman, never having been thrown with a patient suffering from tuberculosis, ever stopped long enough to try to find out just what this disease is doing in the, our own, country?

WHAT TUBERCULOSIS DOES.

Men and women who have made this disease a life study have gathered together a few hard facts which it would be well for all of us to know.

Did you know that tuberculosis kills over 200,000 persons each year in the United States, and that it has been estimated that one person dies of this disease *every three minutes*? It kills one-tenth to one-seventh of all our people, and the money loss in the United States alone, taking into account disability as well as loss of life, is conservatively estimated at *over three hundred million dollars*, and this is a preventable disease, and a disease which can be cured if seen at its early stages and properly managed. Notice, please, *I don't say treated*.

WHAT IS TUBERCULOSIS?

Tuberculosis is a disease, caused by the growth in the body of a tiny germ (too small to see with the naked eye), called the tubercle bacillus. It is a vegetable parasite, and was discovered in 1882 by Dr. Koch, of Germany. This germ grows rapidly in the body, destroying the tissues and producing poisons. It can affect any part of the body, but the commonest form is that of the lungs and is known as consumption.

In most of the hunchback children, and those with stiff hips, the trouble can be traced to this germ.

A consumptive may cough up and expectorate *billions* of these germs in a day.

These germs can not live any length of time in the sunlight, but put them in a dark, damp room and they will live for years.

HOW THE DISEASE SPREADS.

One consumptive can infect hundreds of other people, and still have none the less of the disease for the giving.

If the sputum which comes from a consumptive's lungs is not properly disposed of, it may enter the body of some other person, through the air he breathes, the food he eats, or even through some open wound.

TUBERCULOSIS NOT INHERITED.

There was a time, when it was thought and taught that children inherited the disease from one or both parents.

This is now known to be untrue. The child of a tuberculous parent may not be as strong as the child of a perfectly healthy parent, its power of resistance may be lessened, and owing to this weakened resistance, it may contract tuberculosis or any other disease more readily than it would, did it come of perfectly healthy stock, but get this fact fixed in your mind: *Every case of tuberculosis comes from some other case of tuberculosis, the direct cause being through the discharges of previously infected persons or animals, carried by contact, food or air.*

SYMPTOMS.

Coughs, loss of weight, fever in the afternoon and evenings, night sweats, and hemorrhages should call for an examination by a competent physician. I say a competent physician, because in the advanced stages anyone can diagnose it, but in the early stages (and then is the time you want the diagnosis made), it is not always an easy matter to make a positive statement that this patient has or has not the disease. There are certain changes produced in the sounds normally heard over a healthy lung. The sounds made by "percussing" the chest, as a carpenter would strike a wall, in order to locate a joist, all are significant to the trained ear.

The microscope tells the tale, for when the sputum (the substance coughed up from the lungs) is examined and shows the germs, the diagnosis is absolutely certain.

The State Board of Health at its three laboratories at Pensacola, Tampa and Jacksonville examine specimens free of cost.

THE CURE.

The money wasted, thrown away, on fake consumptive cures, would pave a street 50 feet wide around the world five or six times.

There has never been a drug discovered that would *cure consumption*.

Up to the present day, while certain serums have been thought to benefit, there has been discovered no positive specific.

Sunlight, fresh air, good nourishing food, rest, and patience will effect a cure in a great majority of those cases in which an early diagnosis was possible.

In our southern climate, free from the extreme winters of the north, a tuberculous patient should be able to live out of doors the year round.

No patient was ever cured in the four walls of a room. A tent in the yard, or a screened sleeping porch can be occupied 365 days in the year by consumptives in the south.

A certain amount of rest is essential, in order that the patient may not waste exercise, but let all of his energy go toward tissue building and repair.

HOW TO PREVENT TUBERCULOSIS.

Education covers prevention.

Teach consumptives to dispose of the sputum properly. The best plan is to burn it.

Teach the entire community all you can about the disease.

Teach people the value of fresh air, sunshine, outdoor life, temperate habits and good food.

Teach the patient how not to give the disease to others.

Teach the school children. No matter how young, they can be taught.

Teach the lawmakers so that they will make laws which will prevent the erection of poorly ventilated, dark buildings and factories and pass suitable milk ordinances with a first class milk inspector. Also do away with the common drinking cup.

Teach the rental agencies that they must report to the proper authorities cases of tuberculosis occurring in houses in their charge in order that they may be properly fumigated before other unsuspecting tenants move in.

CAN I HELP?

With a problem of this character confronting us, each individual in a community should constitute himself or herself a committee of one, to assist the health authorities in stamping out this plague.

Organized community efforts give the best results. Better by far than a State-wide organization, though the latter has its place.

Realizing the necessity for a tuberculosis survey of the State, together with an educational campaign, the State Board of Health will, in the near future, inaugurate such a campaign in Florida.

Let every citizen of the State help. The State Federation of Woman's Clubs has already pledged its support. Cities of the size of Pensacola should have a local Anti-Tuberculosis Association, and look out for, and assist in, educating its tuberculous patients. Atlanta and Jacksonville have been doing this work for some time.

An association of this character made up of the men and women of our city who care, could, by educating the rest of the community, have such laws passed and enforced, which would tend to make and keep Pensacola a tuberculosis free city.

BATHS.

To bathe or not to bathe!

Of course, we all thought that matter had been settled definitely long ago, when the old Romans spent big fortunes in building their bathing places of marble, surrounding them with every luxury imaginable, and made their bathing a kind of social function, inviting in the neighbors and spending hours at the entertainment. But it seems to have been questioned recently by some eminent medical authorities writing in their journals, whether or not the average man and woman bathe too frequently, whether they should take a cold plunge or

shower or a hot bath; whether they should use soap or not, and if so, what kind; whether it is safe to bathe immediately before or immediately after a hearty meal—indeed the whole subject seems to have been upset and must be settled over again for the satisfaction of those who are disturbed by the learned discussion of the ultra-scientific.

It is a matter about which each of us is quite likely to have rather fixed views and probably most of us consider bathing, next to eating, an absolute necessity hygienically and for comfort. Yet it is remarkable to note the splendid physical condition of some individuals, particularly among the negro race, whose record for bathing is an absolute blank. The proverbial small boy appears to have an antipathy for water—cold water, at any rate—and his chosen bathing season closes about the middle of September when the old “swimming hole” becomes too chilly for comfort.

But the matter of bathing is an important one, especially in warmer climates like that of Florida, and, strange as it may seem, the bath may be much abused, wrongly used or neglected with the result of serious physical harm.

The primary use of the bath is to secure cleanliness, to remove from the surface of the skin the accumulations of refuse matter brought out through the pores. Perspiration contains a considerable percentage of solid matter, which remains on the skin while the moisture is evaporated or is absorbed by the clothing. This solid matter soon becomes offensive and, according to some authorities, is taken back into the body if not frequently removed by bathing, and it may produce a slow poisoning. The pores become clogged and their natural function is disturbed.

The use of the cold bath is a matter of individual choice. The tendency of a bath of a temperature very much lower than that of the body, is to drive the blood from the surface and to produce congestion in the internal organs, the heart, liver, lungs or brain. If, however, the condition of the circulatory system is such that the heart is able to force the blood back to the surface and to produce a healthful glow, the result is invigorating, stimulating the heart action, and can not but be beneficial.

But as every individual is not possessed of such strong heart action the cold bath is not a safe indulgence for all. If the result is not a prompt reaction of blood to the surface, a dangerous congestion may be the alternative.

The physiological effect of the hot bath is to draw the blood to the surface and away from the brain, producing a lassitude which makes exertion either of the body or the brain a decided effort, until normal conditions are restored. Therefore, the hot bath should never be taken by the individual in normal health, in the morning, when the day's work is before him. The proper time is just before retiring, when sleep will be encouraged by the resulting “tired” condition. The cold bath is not so desirable at night as in the morning for the same reasons.

The relation of the bath to meal time is not generally well understood. The function of digestion draws the energy of the physical system to the stomach. Whatever may interfere with the normal attraction of the blood toward the stomach at such time, will interrupt or arrest the process of digestion. Any interference with such blood circulation or its attraction toward the skin surface, may produce such result. Unless the individual is sufficiently vigorous to resist or to overcome this effect, his all-over bath should not be taken until digestion has so far been accomplished that the blood energy may be safely diverted. Eating and digestion should be under normal conditions of the body, undisturbed by extraordinary demands upon the circulatory system. Therefore, don't bathe within an hour before dinner nor within two hours after.

How often should we bathe? Often enough to keep clean. A plunge or a shower in the morning with a temperature adapted to the physical condition of the individual, and a sponge-off at night, are not excessive, and we may preserve health with one good washing each day.

Obviously the warm or hot bath is almost a necessity to every one occasionally for cleanliness, because for that purpose it is more effective than cold water. And the matter of cleanliness brings up the subject of soap, for soap is a necessity. Its alkalis dissolve the acids of perspiration and remove them more quickly and thoroughly than water alone can do.

The essential differences between the numerous varieties of soap are in their relative percentages of available alkali. Too much of this will attack the skin itself eating into it and removing not only the dirt but the epidermis—the outer thin covering—if allowed to remain long. And there is almost as much difference between the skins of individuals as between the expressions of their faces. Some skins may be able to withstand sapolio and even pumice stone with little apparent effect, while others would be made sore by excessive use of the most dainty of toilet soaps. For the baths of very young babies the only soap allowable is one very low in its content of alkali. And so the kind of soap to be used safely is a thing to be determined by each person, according to the texture of the skin. Experiment with various kinds will eventually determine the variety adapted to his use.

The use of the bath is considered here entirely as a sanitary matter. No reference is intended to its curative value in the treatment of fevers or as a stimulative for weakened conditions, and physicians have found large uses for it under such circumstances.

The probability is small that the average Floridian abuses the bath, either in summer or winter, at least not by overindulgence. The bathroom is as much a necessity as the dining room in the Florida home. Cleanliness is essential to healthfulness and both are conducive to a spirit of godliness, of which no one has credited Florida with having more than its due share.—*Press Service, State Board of Health.*

PURE WATER AND HEALTH.

(Dr. A. H. Doty, the former Health Officer of the Port of New York, is now directing the Medical Department of the Western Union Telegraph Company, and each month gives the public some very interesting and instructive information on matters pertaining to the preservation of health and protection against disease. The Notes is assuming the liberty of copying in full the article on "Pure Water and Health.")

The ocean which covers more than three-fifths of the surface of the globe, is the natural source of our water supply. From it arises a continuous stream of vapor to the atmosphere to be recondensed and precipitated in the form of rain and snow. The far greater portion of this returns to the ocean. The part falling on land either forms rivers, lakes or pools, or penetrates the earth and becomes the great underground water system upon which we so largely depend for drinking purposes. It is both interesting and important to know something of the course taken by the water after entering the ground and the combinations it forms as it descends.

A section of the earth extending downwards for a considerable depth would show the soil arranged in various layers or strata. The significance of this so far as it indicates the formation and age of the earth is well known to geologists. It is also of great interest in connection with the underground water system, for it explains the manner in which it is collected and distributed.

The layers referred to are variously composed of sand, gravel, chalk, clay, etc. Some of them, for instance, clay, are practically impermeable, *i. e.*, water cannot pass through them, while on the other hand, sand is easily penetrated. Therefore, water in its descent passes without difficulty through the latter substance, and upon reaching a layer of clay or some other impermeable stratum, is directed along until it finds an exit somewhere, probably in the form of a spring, or as a supply to some body of water, or it may remain below until an outlet is made for it in the form of a well.

The strata are not uniformly arranged, and are at various levels and frequently curved, sometimes forming large underground basins. As a result water upon entering the earth may reach impermeable strata at different depths, and supply either superficial or deep wells.

Various forms of contamination are carried into the ground by the surface water. Many of these are filtered out by the soil, some are destroyed by oxidation, and some by certain forms of bacteria which live upon organic matter. For this reason water becomes purer as it goes further down and we may expect to find a better and safer supply in a deep well than in a superficial one.

Certain gases confined in the earth may sometimes force underground waters to the surface, although this is usually brought about by the pressure of the water from behind in its effort to reach its own level, for this supply frequently has its origin in mountainous regions, or where there is considerable elevation, and may follow along impermeable strata, sometimes at a considerable depth, and appear at the surface through natural or artificial means many miles away.

During the transit of water through the earth, certain chemical changes take place. The soil is rich in carbonic acid, and the underground water holding this gas in solution dissolves out various mineral substances contained in the strata with which it comes in contact. In some instances the presence of these salts is so pronounced that the water is rendered unfit for general use, although in this State it is often valuable for medicinal purposes.

The most frequent combination is with lime and magnesia, particularly the former. When a comparatively large amount of it is present the water becomes "hard," *i. e.*, the lime or magnesia combines with the fatty acids of soap and prevents the prompt formation of lather, therefore "hard" water is neither satisfactory nor economical for bathing or other domestic purposes. While there is practically no danger in drinking it, it may not be as acceptable as some other kind. Water which contains but little or no lime is called "soft," and is far better and more pleasant for general use. Not infrequently heated water which probably has its origin deep in the earth reaches the surface and forms what are commonly known as "hot springs;" these various conditions have led to the establishment of many celebrated resorts, or "water cures" throughout the world.

If it were possible to collect rain water above the point of contamination in the air it would be the purest and softest supply we could obtain, but as it falls to the ground some form of pollution always takes place, for it washes out the air. In the country it is comparatively small, and does not materially affect its value, but in cities and manufacturing towns where the air is constantly charged with poisonous gases, the products of offensive trades, and the usual contamination of these places, rain water, unless purified, becomes unfit for drinking purposes.

In sections where there is no general water supply to draw from, such as springs, rivers, lakes, etc., and where but little can be secured from underground sources, owing to the peculiar formation of the soil, rain water is eagerly collected. In emergencies it is often caught upon canvas or rubber cloths and for general use large ground areas with cemented floors and underground storage cisterns are sometimes employed, although the common method of securing it is from roofs of buildings. As a rule but little attention is given to the cleanliness of these surfaces, although it is a matter of great importance, provided the water is used for drinking purposes. This protection may be secured in a simple manner by having the waste pipe from the roof so constructed that it can be quickly disconnected from the storage tank at the beginning of the rain, and allowed to discharge over the ground for a few minutes, in order that the roof may be cleaned, and then re-connected with the cistern.

Careful attention should be given to the construction of storage tanks. They ought not be made of wood, which rots and leaks, nor should they be composed of lead, zinc, or iron, for the "soft" water readily dissolves these metals and renders the water unsafe for drink-

ing purposes, furthermore poisonous gases and other forms of impurities will gain entrance into the underground tanks if they are not properly constructed of brick or stone and cement, as they do into cellars having defective walls. Although underground tanks do not freeze in winter, and while the water which they contain may be kept cool in the summer, they cannot be so easily inspected and cleaned, a very important consideration.

Rain water barrels which are commonly found outside the house in the country, are usually unsanitary, as well as defective, besides they are common breeding places for the mosquito, for as a rule they are not properly covered. This will also occur in underground cisterns, therefore the openings of these receptacles should be protected by wire netting.

Spring water in the country is valuable for drinking purposes provided inspection indicates that it is practically free from contamination. It is usually cold, and sparkling, besides receptacles are not needed for its storage. In towns there is always danger of contamination, for although the supply may come from miles away, it is sometimes superficial and receives impurities from the surface. Spring water should be protected against contamination at its exit by stone or cement walls and floors. In addition a pipe may be introduced into the opening, not only for protection but to more effectively direct the water to its exit.

Lakes under proper conditions furnish a very satisfactory drinking supply. The water is still, and the organic matter and other forms of impurities which it contains more quickly settle to the bottom. There is considerable truth in the saying that lakes "purify" themselves. Where lake water is used for drinking purposes there should be a most rigid and constant patrol of its shores to prevent the discharge of sewerage or other forms of filth into the water, besides the intake should be some distance from the shore to still further prevent contamination. The safety of this form of water must always be seriously questioned if there are built up communities along the border of the lake.

The river water of inhabited regions which is commonly used as a general water supply, is very apt to be dangerous and unfit to drink except at its head, where it receives its supply from the mountains or from tributaries which are not contaminated, or before it receives the waste and sewerage of towns. The ease and economy with which municipalities can draw water from these sources has led to many serious consequences so far as general infection is concerned.

River water used by large communities for drinking purposes is generally filtered, briefly speaking, the method usually employed consists in passing the water over filter beds, which are composed of three or four feet of gravel on top of which is a layer of fine sand of about the same depth. Impurities are removed as the water passes down through these permeable layers to its destination. Still this system is open to various objections, and cannot be compared with water obtained from other sources some distance away. The ancient Romans

were aware of this, for although the Tiber runs through the city, the water supply was brought from distant sources by aqueducts so splendidly constructed that some portions are still in use.

Well water is a common source of supply in the country, and like spring water is cool and pleasant to drink. Unfortunately wells are frequently contaminated, and often transmit infectious material; this refers particularly to typhoid fever, and partly explains why this disease is more or less always present in rural districts.

Deep wells are less dangerous in this respect than superficial ones, for the water is usually drawn from below an impermeable stratum, while this does not usually occur in a superficial one, however defective construction will allow surface impurities to reach the interior of deep wells through their walls. Artesian wells constitute an exception to this, for they are bored frequently to a depth of many hundreds of feet to reach below or between impermeable strata where water is held under pressure and which escapes to the surface through a continuous tube or pipe, which if properly constructed admits of but little danger of contamination; for this reason artesian well water is with safety often used in built up communities, although these wells should always be under careful supervision.

There is need of protection about the opening of ordinary wells as the space immediately surrounding them is often a fruitful source of contamination. The old oaken bucket system, which required that the well shall be freely open, is anything but sanitary. In its place a modern pumping apparatus should be used so that the opening can be properly closed and protected, besides the space surrounding the opening of the well should, for a distance of a few feet at least, be graded and cemented from the well outward and downwards, and for ten or fifteen feet down the walls of the well should be constructed with brick or stone and cement. A layer of clay on the outside of the well renders it still more safe.

Wells become contaminated and receive infectious matter usually from nearby privy vaults and outhouses, cesspools, etc., through the soil to the underground water which supplies the well. Therefore in addition to proper construction, a well should not only be placed at the highest practical point, but should be as far as possible from all sources of contamination. The distance cannot be accurately determined, for it depends largely upon the arrangement of the underground strata; however, a careful study of the situation along the lines already referred to should secure sufficient information to place the well fairly out of harm's way.

The presence of infectious contamination is not indicated by the appearance of the water, for the clearest and coolest specimens may contain germs of disease.

Distillation obtains a water which is practically pure, however this is frequently objected to on the ground that it is "flat" to the taste. Recently distilling apparatus have been devised and successfully operated which also aerate the water. This should provide a very pure and

acceptable drinking water and is particularly valuable when the safety of the general supply is questioned.

Sea water also may be distilled and used for drinking purposes. All modern steamships and war vessels are now supplied with apparatus for this purpose and thereby secure an abundance of pure water.

Strangely enough there is but little or no municipal, state or federal supervision over the sale of bottled water, which comes from every section of the world. We have practically no official knowledge as to its character, the methods of bottling, or the means that are taken to prevent contamination of the receptacles by employees or otherwise, with which we should be familiar. Our information on this subject is confined principally to the advertisements of the various waters, whereas it is a matter which should be under strict official surveillance.

Water next to air is most necessary to our existence. It plays an exceedingly important part in maintaining the various functions of the body. It is constantly needed to make up for the loss of moisture from the skin and lungs, and it flushes out certain organs, and, also aids in maintaining the shape and symmetry of the body.

The importance of water in the preservation of health is far from being appreciated, and but few persons drink enough of it. This lack of fluid may lead to unpleasant conditions such as indigestion, torpidity, headache, dryness of the skin, etc., the cause of which is not usually understood.

It is estimated that the adult human being needs two to three quarts of water in twenty-four hours. Probably one-third of this is usually taken in with the food. In addition four or five glasses of water a day under ordinary conditions would be a fair estimate of what the system requires, although it is subject to great changes depending largely upon exercise and climatic conditions, for during the warm weather the skin rapidly abstracts large quantities of water from the system which needs to be promptly replaced. Contrary to the general belief there is no objection to drinking a reasonable amount of water with the meals, although it should not be confined to this time, but distributed more evenly throughout the day.

The value of water in maintaining health requires that the supply shall be as pure as possible. We have already learned in a previous article that to a certain extent the body becomes tolerant of impure air, this same protection exists in connection with water, for there are some forms of impurities in all drinking water which practically do no harm. As a rule water used in cities is of this quality. The danger is not so much from ordinary contamination, but is due rather to the presence of infectious germs, and it is fair to assume that if there is no unusual prevalence of diseases commonly transmitted by water, the general supply may be drunk with safety. During warm weather and particularly among children, certain impurities in the water will often cause a widespread outbreak of stomach or intestinal irritation. The large number affected and the rapidity with which the malady spreads will usually indicate the source of trouble.

It is rather in small communities and in the country where no properly organized health protection exists that each citizen must be alert in protecting his home against improper drinking water. By carefully bearing in mind the way it is collected and distributed, the ordinary means of contamination which have already been referred to, and the necessity for prompt examination if the water becomes in any way suspicious, there should be secured an efficient protection against danger from this source. It may be added that public laboratories usually examine specimens of drinking water free of charge.

There is a practice among those who frequently make short excursions into the country, to drink of the so-called clear and cold well water whenever they can get it. This is unsafe, particularly where the well is not in constant use. Water from this source should not be used for drinking purposes, unless after careful observation and inquiry there is reasonable evidence that it is not contaminated; typhoid fever is not infrequently the result of this imprudence.

When there is reason to believe that water contains infectious contamination there is but one way to render it safe for drinking purposes, provided no other supply can be obtained, and that is by boiling. Simply heating the water to the boiling point is not sufficient for this purpose, for it must be continuously boiled for fifteen minutes in order that all germs which may be present are destroyed. The water should then be cooled and protected against further contamination. In no instance where the water is believed to be infected should either the so-called domestic filters or agents advertised to purify the water be substituted for boiled water for they cannot be depended upon to protect, and are often worse than useless.

While boiling renders the water somewhat "flat" to the taste, as the air which it contains is expelled by the heat, and although there are simple means of aeration, for instance, by agitating the water in an ordinary churn or by dropping the water through a tin plate containing numerous small holes, in order that it may be finely divided and better combine with the air, it is safer for a short period at least to drink the water as it is boiled than to employ means of aeration which through carelessness may again infect it, unless some person in the household is appointed to personally take charge of this work and prevent additional contamination.

In connection with the subject of water it is proper that some reference should be made to ice.

It is a common belief that infectious organisms existing in water, are destroyed when freezing takes place, this is not true, for some of the organisms survive the reduction of temperature and become active again when melting occurs, for instance this has been conclusively proven in connection with typhoid fever.

Although ice may be obtained from water sources where there is no serious contamination it is well known that it frequently comes from bodies of water which receive sewage directly from large towns.

To what extent ice under these circumstances becomes involved it is of course impossible to determine.

It would seem practical and logical in protecting against impure ice that we should use the kind which so far as we can ascertain is most free from danger. Artificial ice is more apt to supply this need, for it is usually made from distilled water and therefore should be pure.

Not infrequently it is stated that artificial ice is rendered unsafe by the ammonia used in its manufacture; that is not so, for the ammonia does not come in direct contact with the water but is confined in pipes and used simply for freezing purposes.

THE MIDWIFE.

(*Medical Record, June 8, 1912.*)

Somewhat out of the usual order of presidential orations is the earnest and eloquent plea for the babies made by Dr. Jacobi at the meeting of the American Medical Association this week. In this address, published together with a report of the proceedings of a great part of the session in this issue of the *Medical Record*, the speaker boldly combats what was until quite recently the prevailing opinion in the medical profession. It has been long and practically universally held that midwives are ignorant and dirty old women who should absolutely be forbidden to follow their dangerous calling, but Dr. Jacobi pertinently asks what the poor would do without them. With all the present overcrowding in the ranks of the profession there are not physicians enough in any of our large cities to attend to all the child-bearing women in the homes of the poor. If all women could be brought for delivery to lying-in hospitals the matter would be simple enough, and everything would speed along as easily and pleasantly as at a husking bee. But all women cannot or will not be confined in an institution; they must have some assistance, they cannot pay for the attendance of a trained physician, so the midwife is their only recourse. The duty of the medical profession, as the orator makes clear, is not to suppress the midwife *but to educate her.* This is done in other countries to the manifest benefit of the nation, for many lives not only of productive women but of future citizens—maybe a Kent or a Helmholtz or a Jacobi—are thereby saved. Many other counsels for the reduction of infant mortality are to be found in this notable oration, but the one which we have picked out for comment is especially worthy of attention on the part of medical men and legislators in this land.

THE POWER OF THE PRESS.

A few days ago a letter was received from Grant, Brevard County, asking that a blank for recording a birth be sent the writer. Enclosed was a clipping from a late issue of the "*Florida Times-Union*" of a short broadside that paper kindly reprinted from *HEALTH NOTES* for March. The article was titled "Register All Birth and Deaths in Your

Family" and appealed to Floridians to register the births of their children as well as their blooded stock.

Now the probability is that the man in Grant did not know the State Board of Health of Florida registered births until he saw this reprint. When it was put tersely before him, he realized what it meant for the child and quickly took advantage of the opportunity to register the proof of its birthright.

The pith of this is the *Power of the Press*.

If all the papers of the state will bring home to Floridians the needs and uses of vital statistics, it will not be long before her births and deaths are accurately recorded.

WOMEN'S CLUBS TO CHECK BIRTH REGISTRATION.

The Children's Bureau of the Department of Labor, under the direction of its chief, Miss Julia C. Lathrop, one of the few, if not the only, woman holding such a responsible position in Washington, is charged by the law of its organization to investigate "all matters pertaining to the welfare of children and child life among all classes of our people, and shall especially investigate the questions of infant mortality, the birth rate, orphanage, juvenile courts, desertion, dangerous occupations, accidents and diseases of children, employment, legislation affecting children in the several states and territories." In the words of Miss Lathrop, referring to birth records, it is "vitally concerned in all efforts to improve registration."

"Birth Registration," its first monograph, is devoted to the need of accurate records of births as the fundamental basis for its work of the study of infant mortality. For it is first necessary to know how many babies have been born before the infant death rate can be calculated.

A later publication—"Auditing the Birth Account: a Necessary Process in Perfecting our Social Bookkeeping"—gives the number of children under one year of age living at the date of the last census, April 15, 1910, and the number of deaths of infants under one year in those states with accurate death records and estimates for the other states. It then gives the totals of the figures which should be that of the births during the year and compares them with the number of births registered during^{*} the same year. This comparison audits the birth account and determines the efficacy of birth registration in each state, and it shows that only Massachusetts, Connecticut, New York, Rhode Island and New Hampshire had approximately complete registration, and that there were only 12 states, including the District of Columbia, which recorded 90 per cent. and over of births. Certain cities are also commended for accurate birth registration, of which only one, Washington, D. C., has conditions which allow comparisons with southern cities.

To check the accuracy of registration, to quote from this publication, "The Children's Bureau is about to enter into a cooperative move-

ment with the women's organizations throughout the country in which committees of women in selected towns and districts will get the names of, say, ten babies each, go to the registration office, see if they are recorded and report the results to the Children's Bureau. (This will involve comparatively little work for the women and will put the Children's Bureau in possession of valuable data on registration.)"

A still later leaflet, "Birth Registration Test," gives explanations, suggestions and directions to these committee regarding the tests above spoken of. The introduction of this leaflet states that the General Federation of Women's Clubs, at its San Francisco meeting, July, 1912, declared that "accurate registration of births and deaths is the essential basis for intelligent effort to conserve infant life, to secure the education of all children, and to protect their working life and legal rights." It closes by saying, "It is hoped that the investigator will utilize every opportunity to familiarize the public with the purpose of the schedule and give any explanation which may tend to bring about general interest in the subject of birth registration and a comprehension of its importance. Some of the reasons why parents should be interested in having the births of their babies recorded are as follows:

In order that figures may be available upon which to base the accurate study of the problems connected with infant mortality.

In order that the individual may have a record to refer to in all questions relating to heredity, legitimacy, property rights and identity.

In order that exact ages may be definitely known, thus making possible the enforcement of the laws regulating school attendance, child labor and the age of consent.

In order that the immediate public recording of a child's birth may notify the public health authorities and thus make it possible to offer the necessary help to mother and child, in cases in which the family may not be able to afford adequate medical and nursing care. Blindness among children in many cases is due to causes easily preventable by proper attention at birth."

Miss Lathrop has now taken up the matter of tests in Florida cities with the State Federation of Women's Clubs, and it is greatly hoped that these tests can soon be made in at least certain of the larger cities, so there may be some definite knowledge of the birth rate in the state. It is especially desirous that something accurate be known of the rate for the negro race, as to which there is no authoritative data except in a few northern localities whose different conditions deny its use in comparison here.

If the Women's Clubs of the larger cities take up this work, their example is sure to spread to the remaining cities and result in increased interest in accurate registration, infant welfare work and good sanitation throughout the state.

Every one desiring to know more of this movement is urged to write to the Children's Bureau, Washington, D. C., and ask for its publications and any special information desired. The Bureau is glad to give all information and help in its power.

FILE YOUR BIRTH CERTIFICATE PROMPTLY.

It is estimated that fully ninety-eight per cent. of all births occurring within the city limits are filed with the Department of Health and that ninety-five per cent. of the returns are received within ten days after the dates of birth. This almost complete compliance with the law has been obtained within the past few years, and then only as a result of disciplinary action on the part of the Board of Health, fines being imposed ranging from ten to one hundred dollars, the amount depending upon the extent of the violations and the record of the individual in this regard.

The Department, by reason of this satisfactory condition, is now in a position to measure its infant mortality (that is, the mortality under one year of age) on each one thousand births reported, enabling comparisons to be made between the rate of this city with that of the large foreign cities and with a few of the large domestic ones.

The uses to which the birth records are put at the present time are many and important and may be divided into five classes:

1. Scholastic; 2, Commercial; 3, Legal; 4, Social, and 5, Statistical.

1. The child seeking admission to the public schools must present a record of its birth, certified by the Department of Health.

2. The law governing the issuance of employment certificates to children between fourteen and sixteen years of age, compels the applicant to furnish evidence of age, as contained in the certificate on file with the Department of Health.

3. Furnishing proof of age is often required in securing legacies, pensions, etc. Very often in criminal cases the prosecution of persons charged with abduction or rape depends upon the evidence on record as to the age of complainant.

4. In Continental Europe marriages may not be contracted unless certain formalities are complied with and one of these is the filing of certified transcripts of official records of birth of the contracting parties.

5. The gauge of infant mortality is best expressed by the number of deaths per thousand births reported and is used entirely by English and continental statisticians in their reports on vital statistics and will undoubtedly come into general use in the country when births are recorded in their entirety.

A word may be said as to the advisability of physicians and midwives complying strictly with the provision of the law which compels the filing of a certificate of birth within *ten days* after its occurrence. It is our experience that the observance of the law is far more complete where medical attendants are held to a strict compliance with the ten-day provision than if laxity as to the date of filing prevails. The Department of Health therefore urges physicians not to wait beyond the seventh or eighth day for parents to make up their minds as to the given name of the infant, but *to send in the certificate without the given name*, which later may be added to the certificate at the future convenience of the parents. Another important procedure for the

medical attendant to follow is to insist upon an acknowledgment by the Department of Health within three or four days of the receipt of certificates mailed to it.—*Weekly Bulletin of the Department of Health City of New York, March 21, 1914.*

ALMOST LOST A CORONET.

A few years ago a young lady socially prominent in this city became engaged to a foreign nobleman. In order that the marriage should be recognized as valid in his country, it was necessary for the bride to attach to the various required papers a transcript of the official record of her birth. As she was born in this city some thirty years previously, the family communicated with the Department of Health requesting the necessary transcript. To their dismay, they found that the attending physician had neglected to register the birth and there was no record whatever at the Department of Health. After much difficulty, the physician who had officiated at the birth, and who was now over eighty years of age, was located and a certificate of birth obtained from him. A blank petition to allow this certificate to be filed was then forwarded to the parents, with instructions to fill out the same and make necessary affidavits before the American Consul in their city. On the receipt of the petition, affidavits and certificate of birth, the matter was presented to the Board of Health, which thereupon consented to record the delayed certificate, thus enabling another of America's fair daughters to realize her fond dream of wearing a coronet. It is not hard to imagine what the young lady and her family thought of the physician's failure to file the certificate at the time of her birth.—*Weekly Bulletin of the Department of Health City of New York, March 21, 1914.*

NOTICE OF EMBALMER'S EXAMINATION.

Friday, May 15, 1914, at the offices of the State Board of Health, Jacksonville, Florida. Applications for examination must be filed with the State Health Officer at least ten days prior to date of examination, on blanks furnished by this office.

STATISTICS.

SMALPOX.

Reported cases of smallpox in Florida, March, by counties (2,241 vaccine points distributed) :

Alachua	34
Bradford	2
Brevard	1
Calhoun	31
Duval	13
Escambia	1
Hillsboro	8
Levy	2
Manatee	1

Carried forward 93

OK

May 22 P.M.
One

STATISTICS—Continued.

<i>Brought forward</i>	93
Osceola	2
Polk	1
Suwanee	2
Taylor	4
Volusia	31
 Total cases smallpox, March	133
Total cases, January 1 to April 1, 1914	275

RABIES.

Report of rabies in Florida, March, by counties:

	<i>No. Persons Treated.</i>
Duval	3
Hillsboro	6
Suwanee	1
 Number person treated, March	10
Treated January 1 to April 1, 1914	28

GLANDERS.

Report of outbreaks, by counties, March:

Duval (horse and mule)	2
Total cases January 1 to April 1, 1914	13

CATTLE TICK ERADICATION—CONSTRUCTION OF DIPPING VATS.

DeSoto county (at Ona)	1
Orange county (at Chuluota)	1
Volusia county (at Emporia)	1
 Total number vats built, March	3
Total number vats constructed in Florida to date	35

APPLICATION FOR HOG CHOLERA SERUM, MARCH, 1914, BY COUNTIES.

<i>County.</i>	<i>C. C. Serum Distributed.</i>	<i>Number of Hogs Serum requested for.</i>	<i>Weight of Hogs to be treated.</i>
Alachua	10,200 c.c.	459	23,075 pounds
Bradford	1,250 c.c.	46	2,100 pounds
DeSoto	800 c.c.	40	2,000 pounds
Duval	600 c.c.	14	1,540 pounds
Escambia	1,250 c.c.	23	2,400 pounds
Hamilton	1,000 c.c.	50	2,500 pounds
Hernando	3,550 c.c.	113	9,300 pounds
Hillsboro	9,000 c.c.	350	19,500 pounds
Jackson	4,500 c.c.	152	9,900 pounds
Lake	2,500 c.c.	82	4,700 pounds
Levy	10,400 c.c.	395	21,700 pounds
Marion	14,950 c.c.	722	32,950 pounds
Osceola	10,800 c.c.	500	32,600 pounds
Pasco	2,400 c.c.	61	6,050 pounds
Polk	4,000 c.c.	150	7,750 pounds
Santa Rosa	900 c.c.	30	2,250 pounds
St. Johns	2,250 c.c.	72	5,800 pounds
Sumter	8,600 c.c.	290	22,400 pounds
Suwanee	17,450 c.c.	630	37,720 pounds
Volusia	7,000 c.c.	260	17,100 pounds
 Totals	113,400 c.c.	4,439 hogs.	263,335 pounds

STATISTICS—Continued.

SPECIMEN EXAMINATION, BACTERIOLOGICAL LABORATORIES.

	Jacksonville.	Tampa.	Pensacola.	Total.
Animal parasites	379	81	27	487
Diphtheria	202	236	19	457
Gonorrhoea	64	38	47	149
Malaria	154	243	37	434
Pathological	8	3	2	13
Rabies	5	3	..	8
Tuberculosis	153	105	48	306
Typhoid fever	105	188	30	323
Water (for sewage contamination)	20	11	7	38
Miscellaneous	52	12	13	77
	1,142	920	230	2,292
Grand total number specimens examined by State Board of Health Laboratories, March				2,292

DISTRIBUTION OF DISEASES DIAGNOSED IN MARCH.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

[—MALARIA—]

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Alachua	1	..	1
Arcadia	2	..	..	2
Bartow	1	1
Bowling Green	1	1
Bradenton	1	1	2
Clearwater	1	1
Chipley	1
Daytona	2	..	..	..	..	..	9	1	..	12
Delray	1	..	..	..	..	..	..	..	..	1
Dunnellon	1	1
Ft. Ogden	4	4
Ft. Pierce	1	2	..	3
Gainesville	..	1	..	..	2	..	1	..	1	5
Greenville	1	..	1
Hampton	1	1
Jacksonville	7	17	..	..	..	..	9	13	66	112
South Jacksonville	..	1	..	..	..	..	..	..	..	1
Key West	..	1	..	..	..	..	..	1	..	2
Kissimmee	1	1	2
Leesburg	1	1
Live Oak	1	..	..	..	1	2
Malone	1	1
Mandarin	1	1
Mayo	1	1
Mulberry	1	..	1
Myrtle	1	1
Miami	1	..	1
Naranja	1	1
New Smyrna	..	1	..	..	1	..	1	..	3	6
Ocala	2	1	..	3
Okeechobee	2	2
Orlando	..	3	..	..	..	..	..	2	3	8
Oviedo	2	2
Palatka	..	1	..	..	..	..	..	..	..	1
Carried forward	10	25	..	..	4	..	25	27	95	186

STATISTICS—Continued.

—MALARIA—

Town.	Brought forward	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Palmetto	..	10	25	..	..	..	..	25	..	..	186
Plant City	1	..	1	1
San Antonio	2	2
Sanford	1	1
Sarasota	1	3
Sebastian	2	2
St. Augustine	2
St. Petersburg	2
Stuart	1
Sumner	1	..	..	1
Sutherland	1	1
Tallahassee	1	3	..	4
Titusville	1	..	..	..	2	5
Torrey	1	1
Wauchula	1	1	..	3
Williston	1	..	4	5
Winter Haven	1	..	..	1
No address given	1
Total	14	25	..	..	5	..	..	31	35	113	223

REPORT OF TAMPA LABORATORY.

Tampa	18	11	..	..	2	2	30	24	13	100
West Tampa	..	..	..	..	..	..	1	..	..	1
Ft. Myers	..	..	..	..	..	..	2	..	1	3
Lakeland	1	1	..	..	..	..	..	1	..	3
Arcadia	..	..	..	..	..	..	2	..	..	2
Wauchula	..	..	..	..	..	..	2	..	..	2
Lutz	..	..	..	..	..	..	1	..	..	1
Plant City	..	..	..	..	..	..	3	..	..	3
Nocatee	..	..	..	..	..	..	1	..	..	1
Bradenton	1	..	..	..	..	..	..	..	..	1
Release diphtheria	18	..	..	..	..	..	..	..	..	18
St. Petersburg	..	..	..	..	..	..	..	1	..	1
Daytona	..	..	..	..	..	..	..	1	..	1
Tarpon Springs	..	..	..	..	..	..	..	1	..	1
Reexaminations	..	..	..	..	..	..	2	..	..	2
Total	38	12	..	..	2	2	44	28	14	140

REPORT OF PENSACOLA LABORATORY.

Pensacola	..	8	..	..	2	..	2	9	10	31
Holts	..	..	..	..	..	..	1	..	..	1
DeFuniak Springs	..	..	..	..	..	..	..	..	1	1
Milton	..	..	..	..	..	..	..	3	..	3
Total	..	8	..	..	2	..	3	12	11	36

Total cases of principal diseases diagnosed by laboratories of the State Board of Health during March:

Central Laboratory	14	25	5	31	35	113	223
Tampa Laboratory	38*	12	4	44	28	14	140
Pensacola Laboratory	..	8	2	3	12	11	36
Total for State	52	45	11	78	75	138	399

*Includes 18 release cultures.

FLORIDA



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Jacksonville.

BRANCH LABORATORIES:
State Board of Health Building,
Florida Avenue and Constant Street, Tampa.
City Hall, Pensacola.

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Anything you want to know about the public health we will try to tell you.
Any information you want about communicable diseases of domestic animals we will help you to get.
Address communications to Jacksonville, Fla.

Screen the earth closet, screen the pantry, screen the kitchen, screen the bedroom, screen the porch; and screen them with the full conviction that such screening is not a luxury but a life-saver.

A COMPARISON.

"Comparisons are odious" but they are often convincing. In spite of the many, many convincing words which the NOTES has printed in regard to vaccination as the only efficient method of smallpox control, there still exists in many communities of Florida a persistent opposition to vaccination, and it seems futile to again bring this matter before the people of the state; but recent occurrences in two Florida towns show so forcibly the efficacy of vaccination that the incidents are here described.

One of the assistants to the State Health Officer was recently called to one of the smaller towns of the state to investigate a supposed case of smallpox. A negro was found to be suffering with the disease and all persons in the community were offered free vaccination and urged to accept this certain method of smallpox prevention. The offer was refused by all, even families living in close proximity to this smallpox case. Instead, the citizens of this community wanted this negro removed to the "pest house" at once, while some of the more excitable ones even suggested that his house and all his belongings be burned. Such procedure was, of course, not sanctioned by the State Board of Health, but the negro was finally removed—at considerable expense to the town—to the isolation hospital in Jacksonville. What permanent benefit has been derived from this expenditure of the municipal funds? Absolutely none! How much simpler, more economical and *practical* would have been the vaccination of the entire unprotected population of the town!

In striking contrast to this incident was the attitude displayed by the citizens of another Florida town. At the time of the assistant's visit over thirty cases of smallpox had occurred among the negroes. Vigorous efforts were made to vaccinate the entire community with the result that about four-fifths of the white school children, a number of other whites, and practically every negro in the town (some 175 or 200 in all) were vaccinated. There was no panic, no excitement, no threats of burning houses; merely a quiet, orderly, systematic campaign of vaccination.

This was more than two months ago and since that time only two cases of smallpox have occurred in this town (both in unvaccinated persons) while in the rural districts in the vicinity of the town thirty-two cases have occurred among persons who refused vaccination.

Which is preferable: vaccination, which is inexpensive and *efficient* or quarantine, which is expensive and *inefficient*? The answer is easy. After all, the prevention of disease is largely a matter of *common sense* and the intelligent application of the knowledge already at hand.

C. H. D.

SYMPTOMS OF RABIES—ITS MANAGEMENT.

There is a great deal more rabies in Florida than we have any excuse for. I say this guardedly, for it is the useless cur—often without a home—nobody's dog—that is responsible for the major portion

of the damage. But we seem averse to taking steps in the direction of eliminating these worthless dogs, and, consequently, it remains for the State Board of Health to do all in its power to acquaint the public with the symptoms of rabies and the proper method of procedure in the event one is bitten.

Rabies in dogs appears in two forms—furious madness and dumb madness. They are one and the same disease, and frequently imperceptibly shade off into each other, making it difficult to distinguish them. Both, however, are rabies and should be treated exactly alike.

In furious madness there are three stages: the stage of melancholia, the stage of excitement or mania (most of the biting is done in this stage) and the stage of paralysis.

The stage of melancholia lasts from one to three days. The first thing noticed about the animal is an *altered disposition*. It may become unusually affectionate and vivacious or sullen and morose. Sometimes this change in disposition will manifest itself as distrust, excitement, fright and restlessness. Sudden change of resting place with persistent licking or gnawing of a part should arouse suspicion that all is not right with the dog. It may lick cold objects and bite at or gnaw everything with which it comes in contact, and during the latter part of this stage a slight difficulty in swallowing, stretching its neck, vomiting, coughing and difficult breathing may be noticed.

The stage of excitement or mania is the dangerous stage for human beings. During this stage, which usually lasts three or four days, the dog will leave home and wander about the country, biting almost everything that attracts its attention. It is utterly without fear, and will attack even a pack of other dogs, cows, horses, chickens, and human beings. It is possessed with a mania for biting, and snaps at the air, sticks, or even its own body. Remember the fact that during this period of excitement the *dog is not at home*, and may wander miles and miles away. It should be remembered that a dog away from home is almost always afraid of man, and a strange dog in your neighborhood which is unusually friendly or is not at all cowardly should be carefully watched. The voice may be, and usually is, altered, and becomes hoarse, rough and howling in character. The first notes are prolonged into a high pitched, long drawn out howl.

In the stage of paralysis the body rapidly wastes away. The eyes are sunken, staring and glassy. The first site of the paralysis is usually the muscles around the lower jaw and which act in swallowing. This causes the jaw to drop down and as swallowing is interfered with, saliva drips from the open mouth. The animal dies from exhaustion in from five to eight days after beginning of symptoms.

Dumb madness differs from the above chiefly in the rapidity of its course, death occurring usually in two or three days.

If you are bitten by a dog or other animal you think might have rabies, do not kill it if it is possible to capture it alive. Put it up where it can do no harm—and remember that if it really has rabies it will make desperate efforts to escape—and watch it for a week. Usually it will die within this time when the head should be carefully packed in

ice and forwarded to the laboratory of the State Board of Health.—
J. E. T.

FLORIDA AND TYPHOID.

Why should the people of Florida have typhoid fever when they don't have to have it?

It isn't compulsory; it is preventable. In its source, its nature and its method of transmission it is disgusting, even to the point of being nauseating, yet it continues from year to year claiming its victims by the scores and hundreds, victims who might be saved. The doctors and sanitists, standing like sentinels to point the way to health and safety, are forced to see the disease choosing whom it will among those who might have been rescued, if they would. It's sad, pathetic, mournful—a careless, wanton, wicked waste of life. It's not suicide only because it isn't a deliberate seeking of death, but the case would be a parallel if a man were to walk among exploding dynamite after being warned of its location.

The source of typhoid fever is the person suffering from the disease. The method of transmission is by the transference of the typhoid germs from the patient to the prospective victim. These germs pass from the body principally in the evacuations of the intestines. Sometimes, though not often, the disease is transmitted by personal contact. They are carried on the feet of flies and they are left wherever the flies alight. Those that make the trouble are the germs that are left by flies in the food which we eat—we eat it if we don't know any better—and once again in the intestinal tract of another human being, the chances are good for another funeral.

The most efficient weapon against typhoid is prevention. It is a thousand times more efficient than cure, for prevention is about that many times less problematic than cure. The steps in the line of prevention are numerous. First, prevent the flies from reaching the faecal matter from the stools of the patient; next prevent flies from reaching food; next, as an additional precaution, wash thoroughly all food that is not to be cooked, and all the time and everywhere kill the fly. Destroy his breeding places in the stable, in the manure pile and in other filth.

The screen for Florida is a necessary means to salvation. Screen the earth closet, screen the pantry, screen the kitchen, screen the bedroom, screen the porch and screen them with the full conviction that such screening is not a luxury but a life-saver.

We know that milk is frequently a vehicle of infection. We know that water has much to do with the dissemination of typhoid, from the fact that cities in Europe where the water supply is perfect seldom number their typhoid cases above ten for each one hundred thousand of population, and in American cities the rate is not usually above twenty in each one hundred thousand, while in cities where the water is impure, this rate goes from ten to twenty times as high.

There is another menace in the fact that about two and one-half per cent of those who contract typhoid fever live to become germ

carriers, that is, after they recover from the disease itself, they continue to carry and scatter its germs for an indefinite period to infect others.

From these facts it is evident that this danger lurks constantly and unsuspected on all sides to menace public health, and from its insidious nature, no person can be absolutely safe from its attack, excepting by unrelenting watchfulness and care.

There is much evidence to prove that some individuals are more susceptible to the disease than are others, and that for them extraordinary precautions are imperative for escape.

But while all sorts of prevention in the line of sanitation help to check the disease, the real victory over it was in the discovery of the principle of inoculation. Without undertaking to discuss the bacteriology of this principle, it is enough to say that the method consists in hypodermically injecting into the blood of the individual millions upon millions of the dead germs of typhoid, which for a period estimated to be about two years, give practical immunity from the disease itself.

The success of this vaccination against typhoid has been remarkable. Its record in the history of hundreds of thousands of cases has been that only one-third as many vaccinated persons have contracted the disease as unvaccinated. More than this, the disease has terminated fatally only one-third as many times with vaccinated persons as with the unvaccinated. In other words, this method of prevention has divided by at least nine the chances of dying from the disease. The value of this discovery has been that it has given the medical profession a new and mighty weapon against the disease and has robbed it of many of its terrors.

But like other weapons, it has no value unless it is used. As a mere ornament or as a scientific discovery only to be talked about, it is just about as useful in fighting disease as the nebular hypothesis. If the people of Florida will fight this disease in dead earnest, if even they will willingly follow the orders of those who are leading the fight, they will be helping. If actively they will avail themselves of this opportunity to secure immunity, they will receive from the State Board of Health all encouragement and instructions; they will receive free treatment, free medicines—like salvation, all they have to do is to accept it to be saved.

No man has a moral or a legal right to become a menace to his family, to his neighbors, to the community, when he may have the means to avoid it. It is the moral duty of every Floridian to see to it that his food and his surroundings do not threaten his health. When he controls property, either as owner or as tenant, it is his duty to keep it in sanitary condition. More than this, it is his duty to take every reasonable precaution to avoid for himself, for those dependent upon him and for his neighbors, the blight of typhoid fever, as well as of other infectious diseases.

Are you going to do your duty this summer, or do you prefer to suffer the consequences?—*Press Service, State Board of Health.*

TYPHOID DISAPPEARS IN THE ARMY.

During 1913 typhoid fever has practically been eliminated from the United States army. What this means can be appreciated only

by those who know the varied conditions under which these men live. About ninety thousand soldiers are scattered over the Philippines islands, Oahu in the Hawaiian group, Northern China, Panama, Alaska and the United States proper. About twelve thousand have been living under canvas in camps in Texas since February, 1913. Five thousand are native Filipinos living in the islands.

In another column Major Russell of the Army Medical Corps gives an account of the disappearance of typhoid in the army. One case of typhoid fever in an inoculated soldier was diagnosed in the battalion at Tientsin, China. Two cases in this country occurred in recruits of four and five days' service, respectively, who had not been inoculated at the time they were taken sick. All usual laboratory methods are used in determining the disease, and all cases of continuing fever are so examined.

The United States census for 1900 gives the average typhoid death rate as 46.5 per hundred thousand inhabitants. Rosenau states that in this country "there are comparatively few communities of 1,000 inhabitants or more, which, during any period of twelve consecutive months within the last decade, have been entirely free from typhoid fever. In 1908, the death toll from typhoid fever was no less than 35,000 in the United States. In other words, one person in 200 contracted typhoid fever that year." This would mean at the 1908 rate, 450 cases in the army at its present strength.

The disappearance of the disease is due to inoculation of all recruits as they enter the service. The general sanitary condition of the posts for the past few years is maintained at the same level, but it must be recalled that soldiers on entering the army by no means lose touch with civil life. They participate in all features of civilian life, just as any other travelers or visitors, and so are exposed to the same chances of infection that civilians incur. The fact that a population of ninety thousand at a most susceptible age has practically no typhoid can be accounted for only by the immunity conferred by the prophylactic inoculation. The extension of this measure to certain phases of civil life is definitely indicated for adolescents who have not had the fever in the presence of an epidemic, or for those leaving their homes for travel or for life in the country. Is there no value in this procedure to railroads and other industrial concerns that employ armies of skilled labor, as well as to the individual on farms and railroads whose family is dependent on his manual labor for livelihood? The way has been shown for reducing greatly the three hundred thousands cases per annum in this country by a procedure causing even less inconvenience than smallpox vaccination.—*The Journal of the American Public Health Association.*

RULES FOR CONSUMPTIVES.

Acting under a law of 1912, the New Jersey State Board of Health has issued the following rules, which are to be followed by all consumptives in that State:

1. All persons suffering from pulmonary tuberculosis (consumption) shall effectively destroy their sputum (spit).

2. All persons suffering from running sores due to any form of tuberculosis shall burn all soiled dressings immediately after removal.

3. The room occupied by a tuberculosis patient shall have at least one outside window.

4. No person suffering from pulmonary or other communicable form of tuberculosis shall handle food designed for the use of others except when necessary in the performance of household duties, unless the food be wrapped in such a way as to protect it from contamination or unless some necessary subsequent process of preparation such as cooking will sterilize it and prevent its carrying infection to the consumer.

5. The manufacturing of any kind of goods for commercial purposes or the performance of any work known as "shop work" in the home of any person suffering from pulmonary or other communicable form of tuberculosis, is prohibited, unless the product is such as can be sterilized, and unless sterilization is done in strict accordance with the requirements of the local board of health.—*Press Service, National Association for the Study and Prevention of Tuberculosis.*

INDIGENT SMALLPOX CASES—NOTICE TO PHYSICIANS.

Physicians will please note the following revised instructions in managing smallpox in indigent cases:

SPECIFIC INSTRUCTIONS.

The State Board of Health cannot under the law, pay for the care of cases of smallpox which have not been reported to the Board, nor where the expense incident to such care has not been previously authorized by the State Health Officer. The Board pays for medical services at the rate per visit for any ordinary sickness in the locality. In mild cases but few visits should be made or required. In rendering bills for such services and expenses incurred, form 291 is to be used. This form has been devised upon instructions from the Attorney of the State Board of Health, and has the approval of the State Comptroller, for use by the State Board of Health in disbursing public health funds in the care of smallpox.

Groceries and necessary drugs will be furnished each indigent smallpox patient; the groceries at rate not to exceed fifty cents per patient per day.

When purchases of these supplies are made and amount to more than a few dollars, the merchant or druggist should render his bill, itemized fully, in duplicate, direct to the State Board of Health, having thereon the approval of the purchasing officer. Where the person in charge of smallpox himself pays for such drugs or groceries or both, for which reimbursement is thereafter to be made, fully itemized, receipted bills, in duplicate, must accompany the bill for reimbursement and services (form 291).

The term "indigent" is used to include only those who have not sufficient means ahead to provide for themselves or families during

isolation with smallpox. No others are to be furnished with groceries or drugs at the expense of the State Board of Health.

Nurses for smallpox patients are not allowed at the expense of the State Board of Health, except in very exceptional cases when special permission must be obtained.

The person reporting smallpox will not take charge of any case at the expense of the State Board of Health until he receives a telegram or letter from the State Health Officer to that effect. Expenditures prior to receipt of letter or telegram of authorization from the State Health Officer are unauthorized, and will not be paid for by the State Board of Health.

More detailed advice is given in the following form letter, which is forwarded to attending physician together with blank forms 290 and 291, immediately upon receipt of report of smallpox. Form 290 is used in making formal report of smallpox and submitting case record; form 291, reimbursement blank, should be used in submitting bill for services, etc., in duplicate.

Dear Doctor: Your report of case of smallpox at has been received. I am obliged to you for the information. As soon as possible and if practicable one of the assistants to the State Health Officer will visit and take charge of the situation, but until he arrives, if you will look after the indigent case or cases of smallpox, the state will pay you for the service on the following terms:

If the case is mild it will not be necessary for you to see the patient more than once or twice a week, and for such service you will be paid the usual charge of a visit in your locality to a person suffering from any ordinary sickness. If you are vaccinated you incur no personal risk. Mild cases of smallpox do not require daily attention. Confluent cases may, but the instances where this attention is demanded are exceedingly few. If there is more than one case in a house it will be satisfactory to ask a fee consistent with the number seen and prescribed for or advice given, but not to exceed half the amount of a visit to a single patient. The state will allow the absolute necessities of living for the indigent, such as coffee or tea, grits, flour, or bread and molasses, bacon, and in extreme cases of confluent smallpox, milk and eggs and the needful medicines. In the latter, it has been found from extensive experience in the treatment of smallpox in this latitude, that very little medication is necessary. It should be remembered that the state looks after the indigent cases of smallpox only at points where the state has no hospitals, that is to say, those who are financially unable to care for themselves, and who depend altogether on daily wages for subsistence and existence. People who are able from a monetary point of view to care for themselves should do so, for smallpox is a preventable disease and having smallpox is clearly due to neglect, indifference or downright obstinacy on the part of individuals in not properly protecting themselves by vaccination. Therefore, if otherwise intelligent people and well-to-do people in this world's goods are neglectful of their physical welfare, they should bear the expense of their own carelessness.

Where smallpox is reported the premises should at the same time be placarded, so that the unvaccinated public may be warned, and those with the disease cautioned against leaving the house without permission from the attending physician or state official having charge of the situation. The caution should embrace a warning that a failure to observe the order for isolation will subject the offender to a prosecution in the courts of the state for disobedience of the rules and regulations of the State Board of Health. The State Board of Health will appreciate it if you will impress upon the municipal authorities, vaccination of all exposed persons, and generally advise every one to accept this sure preventive to a loathsome disease.

If you are willing, doctor, to accept the conditions of this letter, I shall be glad for you to take charge of the case (or cases) until the arrival of one of the assistants to the State Health Officer.

Kindly let me hear from you.

Yours very truly,
JOSEPH Y. PORTER,
State Health Officer.

"VIRGINIA'S ROLL OF LIFE AND DEATH".

The above legend, in heavy Roman capitals, forms the center of the front cover page of the Virginia Health Bulletin for November, 1913. The pamphlet contains fourteen pages, and is devoted to telling the citizens of Virginia why such health work is necessary, what it will do for the people, and something of what it has already revealed.

Until a year ago no general record of births and deaths, mortality of diseases or their distribution was kept in the state, though a few cities had partial records of births and deaths. It is estimated that during this first year of enforcement of the registration laws, 90 per cent of all deaths and 83 per cent of all births have been reported. This seems to the *Journal* a very satisfactory beginning for such an undertaking, scattered as are the localities from which the reports must come and varied as are the people who make them. One important item, full of grim significance, is that "the reported death rate among the whites of the state was 11.4, while the rate among the negroes was 19.1," almost, but not quite two to one. A remarkable feature disclosed is the number of children born dead in the state during the twelve months, 2,291, about equally divided between white and colored. During the year 145 persons died of pellagra, and there were 245 homicides.

Altogether, "Virginia's Roll of Life and Death" makes interesting reading for the medical man and the student of statecraft.—*Editorial, Southern Medical Journal, April, 1914.*

FLORIDA FUNERAL DIRECTORS ENDORSE VITAL STATISTICS AND BURIAL PERMITS.

At their convention lately held the Funeral Directors of the state adopted the following:

The Florida Funeral Directors' and Embalmers' Association, in its Eighteenth Annual Convention at Jacksonville, May 14, 1914, assembled:

Realizing the importance of vital statistics to public health work and as the only authoritative corroboration of the healthfulness of any locality in the state;

Resolved, That each community should collect vital statistics in uniformity with each other and with other states, and should require burial permits as the means of obtaining accurate death registration, and that each community should also provide a health officer to watch and use these reports for the public weal; and it

Further resolves, To cooperate to the fullest extent in its power in establishing the accurate collection of these statistics throughout the communities of the state and in upholding public health work, and it urges each of its members, and all others in like business, to use their best individual endeavors likewise in their own communities.

STATISTICS OF TRANSMISSIBLE DISEASES.

The vital statistics of greatest consequence are not the number of deaths or the number of births, nor even the number of deaths from preventable diseases, but rather the number of cases of sickness from transmissible diseases. The cost and danger to society from preventable diseases, such as typhoid, diphtheria, scarlet fever, measles, are imperfectly represented by the number of deaths. Medical skill could gradually reduce death rates in the face of increasing prevalence of infectious disease. With few exceptions, only those patients who refuse to follow instructions will die of measles, diphtheria, or smallpox. The scarlet-fever patient who recovers and goes to church or school while "peeling" can cause vastly more sickness from scarlet fever than a patient who dies. Dr. W. Leslie Mackenzie, who has recently written *The Health of the School Child*, said years ago, while health officer of Leith:

"Death is the ultimate and most severe injury that any disease can inflict, but short of death there may be disablement, permanent or temporary, loss of wages, loss of employment, loss of education, increase of home labor, increase of sickness outlays, increase of worry, anxiety and annoyance, disorganization of the household, general impairment of social efficiency."

The best guarantee against such loss, the best protection of health, and the most essential element of vital statistics is prompt, complete record of cases of sickness. Statistics of sickness are confined to sickness from transmissible diseases, because we have not yet arrived at the point where we recognize ~~the state's right to require information,~~ except when the sick person is a menace to the health of other persons.—

Dr. William H. Allen, Secretary Bureau of Municipal Research, in his "Civics and Health."

INFANTILE MORTALITY.

The approach of summer calls attention to infant mortality which is always high during the very hot months and makes it well to con-

sider what this amounts to in Connecticut, to seek the cause and apply the necessary remedies. Thirty-three hundred infants under one year of age die annually. This amounts to nearly twenty per cent of the total death rate and is about one-ninth of the total birth for a year. Of this number one-half die under the age of two months, mostly from congenital causes, such as premature birth and inanition. Above the age of two months the more common causes are gastro-intestinal disorders.

Much valuable work is now being done to improve the milk supply of the state and this has been found to have an appreciable effect upon the infant death rate. Health officers should do all they can to see that the milk supply comes from healthy animals and that it is protected from contamination from the time it leaves the cow until it reaches the consumer. They should aid and cooperate in all movements to educate mothers in the care of their babies. In some of our larger cities milk dispensaries have done a valuable work. These should be in charge of a physician to advise mothers with regard to care and feeding and he should be assisted by a trained nurse to visit and give advice in the home.

Considering the very high rate in infants under three months old many of whom live only a few days or hours, also the fact that there are more than a thousand still-births recorded each year, it is evident that we must go a step further in seeking the cause, and apply the remedy to the mother as well as the child. Something should be done for her for the child's sake, if not for her own. Babies are often found ill nourished because the mother is too poor to buy proper food for herself, and means must be found to obtain this while she is nursing her baby. A healthy child is not to be expected as the offspring of intemperate or underfed parents. Many mothers endanger the lives of their children by working too hard during the latter months of pregnancy and it is now a well established fact that the infant mortality is high among the babies of women who work in factories and mills. Too frequent child bearing is also a cause of debility in mother and infant. These are matters in which charity organizations and social workers are interested, and with whom health officers should always be ready to cooperate.—*Monthly Bulletin, Connecticut State Board of Health, April, 1914.*

FLORIDA FEDERATION OF WOMAN'S CLUBS AND VITAL STATISTICS.

This strong organization has placed itself on record as to the need and value of the statistics of births, deaths and sickness, and has declared them one of the important matters the federation is pledged to further during the ensuing year.

They say: * * * "that vital statistics, the registration of birth, sickness and death, is the bookkeeping of humanity, and as necessary to the intelligent conducting of the business of life as is other book-keeping to the conduct of other business, and that it should receive expert attention and the support of all loyal citizens. Health can be

no longer a matter simply of private concern, and these statistics, as evidence of community sanitation, and community efficiency, should be public records for the public enlightenment. The health of a community is its working capital, and these records should point out the waste of life as unerringly as the books of any private business point to waste of money."

COSTLY ECONOMY.

Many states collect virtually no vital statistics. As indicating the need of such records in every State, the census of 1910 shows that in the registration area there were born that year 153,373 babies, of which number 1,946 lived less than a day; 36,357 less than a week, and 58,089 less than a month. The need of prompt registration is obvious, not only to save lives, but to put visiting nurses, philanthropic and various social agencies in immediate touch with that class of homes responsible for this enormous mortality.—*The Human Factor published by Equitable Life Assurance Society.*

Mr. Sterling Manly, the grandson of former Governor Manly, is in the employ of the United States navy. It appears that after a man has been in the service a certain length of time and attained a certain age, he is entitled to an increase in pay. Mr. Manly became entitled to his pay, and upon applying for it he was requested to furnish proof of his age in the form of a birth certificate. He, of course, wrote to the authorities of the state for his birth, and asked them for his birth certificate. Being a North Carolinian, he had to be informed that until the last few weeks North Carolina has kept no record of the births and deaths of her citizens. An appeal was made to his church for records of his baptism, but, according to the last reports, none was found.

Everyone has a right to have at least the two essential facts of his existence, his birth and his death, officially recorded.—*Oregon Health Bulletin.*

One-third of the blindness of the United States is due to lack of care of the eyes of infants at the time of birth. Health authorities and private agencies are endeavoring to check this preventable blindness, especially among the poor. Without prompt birth registration, these efforts are futile.—*Extract from "Birth and Death Bookkeeping," of Association of Life Insurance Presidents.*

It is a sad and alarming fact that more than one-fifth of the children born in the civilized world die before they reach five years of age. This is the infantile mortality, not of darkest Africa, nor among the bushmen of Australia, nor the pygmies of Central Africa, but here, in these United States of America.—*Victor C. Vaughan, M. D., President-elect American Medical Association.*

STATISTICS.

SMALLPOX.

Reported cases of smallpox in Florida, April, by counties (2,322 vaccine points distributed):

Alachua	6
Bradford	2
Calhoun	1
Citrus	1
Clay	1
Columbia	2
Duval	14
Escambia	11
Hillsboro	18
Jackson	14
Lake	6
Osceola	8
Santa Rosa	6
Seminole	2
Taylor	1
Volusia	68
Total cases smallpox, April	161
Total cases, January 1 to May 1, 1914.....	436

RABIES..

Report of rabies in Florida, April, by counties:

	<i>No. persons treated.</i>
Hillsboro	2
Suwanee	1
Number persons treated, April	3
Number persons treated, January 1 to May 1, 1914.....	31

GLANDERS.

Report of cases, by counties, April:

Hillsboro (2 horses, 2 mules)	4
St. Johns (mules)	2
	—
Total cases, April	6
Total cases, January 1 to May 1, 1914.....	19

Cattle Tick eradication—construction of dipping vats:

Duval County (at Jacksonville)	1
	—
Number of vats constructed, April	1
Total number vats constructed in Florida to May 1st 1914	36

Distribution of hog cholera serum, April, 1914, by counties:

<i>County.</i>	<i>C. C. Serum Distributed.</i>	<i>Number of Hogs</i>		<i>Weight of Hogs to be Treated.</i>
		<i>Serum Requested for.</i>	<i>Carried forward</i>	
Alachua	7,750 c.c.	267		17,850 pounds
Bradford	11,200 c.c.	393		27,800 pounds
Columbia	6,750 c.c.	225		16,875 pounds
DeSoto	8,900 c.c.	284		17,500 pounds
Hamilton	16,600 c.c.	698		40,300 pounds
Hernando	3,000 c.c.	90		7,500 pounds
<i>Carried forward</i>	54,200 c.c.	1,957 hogs		127,825 pounds

STATISTICS—Continued.

County.	C. C. Serum Distributed.	Number of Hogs Serum Requested for.	Weight of Hogs to be Treated.
Brought forward	54,200 c.c.	1,957 hogs	127,825 pounds
Hillsboro	7,000 c.c.	324	17,800 pounds
Jackson	21,990 c.c.	936	51,725 pounds
Lafayette	950 c.c.	30	1,950 pounds
Leon	1,800 c.c.	50	3,125 pounds
Levy	8,200 c.c.	323	17,390 pounds
Liberty	8,000 c.c.	270	15,600 pounds
Marion	2,750 c.c.	85	6,250 pounds
Osceola	5,850 c.c.	175	12,750 pounds
Pasco	1,500 c.c.	75	3,750 pounds
Polk	600 c.c.	14	1,400 pounds
Santa Rosa	1,250 c.c.	30	3,000 pounds
Seminole	500 c.c.	17	1,275 pounds
Sumter	5,500 c.c.	180	11,975 pounds
Suwanee	16,850 c.c.	545	37,300 pounds
Taylor	2,400 c.c.	60	5,100 pounds
Walton	800 c.c.	40	1,200 pounds
Dr. DeMilly	3,000 c.c.*	37	2,900 pounds
Totals	143,140 c.c.	5,148 hogs	322,315 pounds

*880 c.c. used, balance on hand by Dr. DeMilly, assistant veterinarian.

Specimen examination, bacteriological laboratories:

	Jacksonville.	Tampa.	Pensacola.	Total.
Animal parasites	449	114	42	605
Diphtheria	132	98	14	244
Gonorrhœa	60	40	37	137
Malaria	199	283	27	509
Pathological	5	11	2	18
Rabies	3	6	—	9
Tuberculosis	158	126	30	314
Typhoid fever	171	227	17	415
Water (for sewage contamination)	18	5	5	28
Miscellaneous	46	26	31	103
	1,241	936	203	2,382

Grand total number specimens examined by State Board of Health Laboratories, April 2,382

DISTRIBUTION OF DISEASES DIAGNOSED IN APRIL.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

(— MALARIA —)

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Apalachicola	1	..	1
Altoona	1	1
Apopka	1	..	1
Arcadia	1	1	..	2
Archer	1	1
Bartow	1	..	1
Brzdentown	—	—	—	—	—	—	—	..	1	1
Carried forward	1	4	3	8

Distribution of Diseases Diagnosed in April—Continued.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

—MALARIA—

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Brought forward							1	4	3	8
Bronson	3	3
Center Hill	1	..	1
Chattahoochee	1	..	..	..	..	..	..	1	..	1
Cocoa
Daytona	1	1	..	2
Delray	1	1	..	..	..	..	..	..	1	3
Dupont	1	1
Ft. Pierce	..	1	..	..	..	..	..	..	1	2
Freeport	1	1
Gainesville	3	..	1	1	..	5
Greenville	1	..	..	1
Gretna	1	..	..	1
Hampton	1	1
Hernando	1	..	1
Jacksonville	9	12	..	..	3	1	6	18	33	82
Jasper	3	..	..	..	..	3
Key West	5	..	..	..	..	..	..	..	..	5
Lake Butler	1	..	..	1
Lake City	1	..	2
Lake Worth	2	..	..	2
Leesburg	1	..	1	..	..	2
Live Oak	1	..	2	..	..	3
Mandarin	4	4
Mayo	1	1
Murdock	5	..	..	5
New Smyrna	..	1	..	..	..	..	..	..	2	3
Newberry	1	1	2
Ocala	1	..	18	19
Olkawaha	1	..	1
Orlando	3	..	..	..	..	1	3	1	6	14
Oviedo	1	1
Palatka	..	1	..	..	..	..	1	..	1	3
Plant City	1	..	1	1	1	4
Princeton	2	2
Quincy	2	..	..	2
San Antonio	..	1	..	..	..	..	..	..	2	3
Sanford	..	1	..	..	..	..	..	..	..	1
St. Augustine	1	..	..	..	1	..	..	..	33	35
St. Petersburg	1	..	1	2
Sebastian	3	3
Starke	1	..	..	1
Stuart	..	1	..	..	..	..	..	..	..	1
Tallahassee	1	..	2	3	3	9
Titusville	2	..	..	..	..	..	1	..	..	3
Wauchula	3	3
Williston	..	1	..	..	..	..	..	..	10	11
Winter Garden	1	..	1
W. Palm Beach	1	1	..	2
Total	20	22	..	..	14	2	36	36	138	268

Distribution of Diseases Diagnosed in April—Continued.

REPORT OF TAMPA LABORATORY.

—MALARIA—

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Tampa	3	14								77
Fort Myers								1	1	3
Plant City								2	2	2
Manatee									1	1
Lakeland									1	3
Ft. Ogden								2	2	2
Arcadia										1
Mulberry							1			2
Avon Park							1			1
Sarasota							1			1
Punta Gorda							1			1
Key West							1			1
Re-Examinations							4			4
Wauchula								1		1
Nocatee								1		1
St. Petersburg								1		1
West Tampa	1									1
Release Cultures	5									5
Total	9	14			12	1	31	28	13	108

REPORT OF PENSACOLA LABORATORY.

Pensacola	17		2				9	15	43
Milton						1			1
St. Andrews								1	1
Panama City							1		1
DeFuniak	1							1	2
Tallahassee	1								1
Bagdad						1			1
Total	2	17		2		2	10	17	50

Total cases of principal diseases diagnosed by laboratories of the State Board of Health during April:

Town	Diphtheria.	Gonorrhœa.	Malaria.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Central Laboratory	20	22					
Tampa Laboratory	9*	14					
Pensacola Laboratory	2	17					
Total for State	31	53					
*Includes 5 release cultures.			31	69	74	168	426

HR

FLORIDA



Health Notes



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Palatka, Fla.

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State Board of Health Building,
Florida Avenue and Constant Street, Tampa.
City Hall, Pensacola.

Sent to any address in the State for the asking.
If you receive it without asking, it means that someone else has requested
it for you.

When you change your address drop us a card.
When giving change of address, give both the old and the new.
Anything you want to know about the public health we will try to tell you.
Any information you want about communicable diseases of domestic animals
we will help you to get.
Address communications to Jacksonville, Fla.

*Vital statistics and disease registration constitute the fire alarm system.
They sound the warning and show when and where and to what extent disease
is prevalent, and its nature.—Atlanta Constitution.*

OK

PLAQUE STATUS IN HAVANA.

Through the courtesy of Dr. Juan Guiteras, director of sanitation of the Island of Cuba, the *NOTES* presents to its readers a translation of the report of the present situation of plague in Havana and Cuba as given to the honorable secretary of state of the Republic of Cuba by the honorable secretary of health. The Republic of Cuba is the only country under either democratic or monarchical rule, which has an independent secretary of health in the ministerial or cabinet council of governmental administration. Other countries in Europe have secretaries of health, but they are under divisions of other governmental authority. Cuba has a secretary of health in the president's cabinet.

They "do things" in Cuba when it becomes necessary, and the people are educated to that degree that when the health authorities say such and such must be done, there is a graceful submission to the law and dictum of those who are charged with the preservation of the public health. Just to think of shutting up seventeen blocks in the commercial center of Havana because it was thought necessary to go to this extreme in getting rid of plague infection.

While Cuba is one of the youngest republics on the map, yet it is the oldest in sanitary execution of required methods to preserve the public health. A health officer has only to visit Havana, have a talk with Dr. Guiteras, go through the different administration buildings, to become convinced that the health authorities of Cuba are far in advance of other republics in matters relating to the preservation of the health of the people.

"HAVANA, May 22, 1914.

*"Secretary of State,
Presents.*

"DEAR SIR—According to Article IV of the Convention of Public Health of Washington, 1905, I have the pleasure of advising you that during the week ending May 22, 1914, not a case of bubonic plague has appeared in the Republic of Cuba.

"Reviewing the history of the present outbreak we can safely state that since February 22nd up to date nineteen cases have developed with three resulting deaths. Although one of the cases occurred in an interior town (Artemisa), its origin is so closely associated with one of the Havana foci, that it can not be considered as a separate focus.

"There have really appeared in Havana only two foci of infection, namely:

"One in the commercial district, which seems to be a recrudescence of the focus which developed in 1912, that is, by importation in the grocery wholesale department near the docks of Caballeria.

"The other one developed in the city stables used for the collection of garbage, evidently, by transmission from the commercial zone, which transmission we more readily believe has taken place by means of waste matter infected with fleas than by rats. This focus is the only one in which we have been able to detect the presence of infected rats.

"Our campaign has had as its basis:

"1st. The entire removal and suspension of all kinds of business transactions and operations except those strictly pertaining to sanitation in the places of infection and its surroundings. In the government stables this measure has been carried out to the extreme, destroying such places by fire, and in the commercial district, we went as far as to close up at one time seventeen square blocks.

"2nd. The complete destruction of rats and of all kinds of insects within the infected district by fumigating with hydrocyanic acid used in great quantities; by constantly spraying with cresol solution; by sulphuric acid; by the inundation of buildings; by having the ceilings, walls and floors rat proof; and by injecting the above mentioned solutions into the rat caves and into the sewers.

Guinea pigs have been employed to prove the existence of infection in such places where no cases of bubonic plague appeared in human beings, and likewise to prove the efficacy of fumigations.

All these measures of destruction and rat killing are being actively maintained.

"Up to date 19,000 rats have been examined, two of them having been found to be infected with bacillus pestis.

"Yours sincerely,

"(Signed) ENRIQUE NUNEZ,
"Secretary of Sanitation and Beneficence."

COMMUNITY HYGIENE.

Every man is his brother's keeper.

He can't help it any more than the neighbors can, much as they might like to. He can't evade the responsibility of such relationship unless he lives in the wilderness and never comes into contact with his fellow man. It is a law of society as fixed as any other enacted by the Almighty.

His conduct, good or evil, or careless, must affect others accordingly. Individual responsibility to society can not be escaped, whether it be in morals or in physical affairs. The criminal lowers the moral tone of the community, disgraces it and exerts a degrading influence. The man who lives in dirty surroundings invites disease and thereby endangers the health and possibly the lives of his neighbors.

The conclusion is inevitable that it is the duty of every man to keep himself and his premises clean and healthful, not only for his own sake but for that of those who by force of circumstances must associate with him.

Community cleanliness, community sanitation is just as much a duty that every man owes his neighbors as to be decent morally, for physical illness has a strangely intimate connection with moral degeneracy.

It is a fact that in the past and to a large degree in the present law strictly enforced is essential to secure municipal sanitation. This is due partly to ignorance, partly to perversity and indifference. Some otherwise good citizens will persist in allowing their dogs to run at large unmuzzled, and they make a fearful fuss when the police interfere for the actual safety of the community. They howl louder than their worth-

less curs when anyone presumes to enforce the idea that the rights of society are superior to their own selfishness.

Some of the ablest scientists in the world have demonstrated that typhoid fever is a germ disease, transmitted by flies, yet it requires the services of the police to compel the screening of earth closets. The same investigators have proven the transmission of yellow fever, of malaria and other diseases by mosquitoes; they have pointed out the methods of prevention, yet the pleas and protests of sanitarians and health boards are disregarded by the vast majority of Floridians.

The opening decades of the twentieth century have been marked by splendid organization and magnificent effort for the moral uplift of those who need uplifting. There has been a practical recognition of the fact that morals can not be permanently improved while physical conditions remain unimproved—that the hungry man in ragged clothes is not likely to be or to become a devout Christian. There has been a recognition of the great fact of human brotherhood, but there has not been a corresponding organized effort toward increasing the knowledge of proper sanitation or to arouse a sentiment for better healthfulness through cleanliness among the same classes that need the uplift.

Good health is the basis of good morals. You can't deny or dodge that fact, and the great moral uplift of the world won't come so long as you work on any other hypothesis.

It is a plain, hard fact that Florida will not get into its full stride toward its greatest prosperity until the individual citizen, no matter how exalted or humble, shall realize his personal responsibility in lowering the sick rate and the death rate through voluntary, and not legally enforced, sanitation, through conscientious and intelligent effort to avoid disease; in other words, by doing everything in his power to raise the standard of community hygiene. Anything less than this is not in accord with the highest type of citizenship.—*Press Service, State Board of Health.*

GOOD HEALTH EVERYWHERE, EXCEPT AT HOME.

The Journal has published columns of matter telling what science has done to prevent disease and to make good health possible for almost everyone.

In the list of examples cited, probably none is more conclusive than the statistics of fact which are presented by the regular army and by the work of our army surgeons in Cuba, in the Philippines, and at Panama. And now, added to this list we have Vera Cruz. Concerning the record at Vera Cruz, the *Chicago Journal* says:

"Not a soldier, sailor or marine of the United States forces at Vera Cruz has been incapacitated by typhoid fever. Not one has suffered from smallpox. Though both diseases are epidemic in the captured ports—or were, until the coming of the American sanitarian—our soldiers and jackies have remained immune."

"Yet typhoid fever disables and kills thousands of people each year in the United States, and smallpox wanders around the land like a

scared but malignant ghost, spreading disfigurement and death by stealth.

"If Americans can defy these diseases in a foreign town in the tropics, a town famed for its high sick and death record, why is it not possible to do as well at home?

"It is possible; but 'homefolks' are not yet roused to the point of enforcing known rules of health with military precision. The anti-vaccinationist still yammers through the land, repeating his litany of ignorance and prejudice, and invoking, to the best of his ability, the plague gods which ruled the earth of old. A large part of our population is still willing to 'take a chance' with its own health, and any number of chances with the health of others.

"Even so, the example of Havana, Panama, and now Vera Cruz, ought to count for something. Vaccination against typhoid should become more common and this tried protection against smallpox should be made universal."

These observations about the possibility—nay, the surety—of good health at home are particularly applicable to Florida.

Florida is naturally the healthiest state in the Union. There is no reason why there should be any smallpox, typhoid, or malaria anywhere in the state. There would not be any of these diseases if we would simply observe the simple rules and precautions which science has laid down for their prevention.

If science can conquer these diseases in the tropics, they can be absolutely prevented here. Why don't we do it?—*Pensacola Journal*.

A CONFIDENTIAL LETTER.

Through the courtesy of *Life* we quote the following letter:

"Copy.

"House-Fly & Co.

"General Dealers in Typhoid Fever, Diphtheria, and other Infectious Diseases. Sickness and Death from Our Infections Warranted to be Higher than that of Any Other Firm in the Same Line of Business.

"CARELESS TOWN, E. W., May 15, 1914.

"DEAR SIR OR MADAM—This is to inform you that we will be at your screen door earlier than usual this summer, with a choice line of summer infections, including typhoid fever, diphtheria, etc. Special inducements for babies are offered in a new line of bacteria, insuring long illness and slow death.

"We desire to call particular attention to an insidious variety of bovine tubercle bacillus, which we carry to your milk supply. This tubercle bacillus is warranted to produce large tuberculous glands in your children and slow tuberculosis of the bowels, which we guarantee to be fatal in twenty per cent of the cases infected.

"Our firm finds it unnecessary to call the attention of our patrons to results. We get them. Look at your cemeteries filled with the patrons of the line of products we carry. Visit our hospitals; the beds are

occupied by those we infected. Not a city in the country has less—many more—than ten per cent of its people sick. No other firm can point to so many cases of typhoid or so much illness among babies as we can, as a result of our methods.

"Can't you see the advantage we have over hog cholera or pip? Walk through your orphan asylums; who made the fatherless and motherless children? *We did.*

"Every July, August and September we increase the sickness and death of our babies several hundred per cent; we cause babies to die by the thousands. We laugh at our enemies who dole out insect powder, which only gives us a good drunk; and fly poison, which doesn't materially interfere with our business. No one can hurt us until the vault closet, manure heap, open garbage pail and dirty yard are wiped out. Of course, that won't be done right away.

"Yours for dirt, disease and death,

"HOUSE-FLY & Co.

"To Madam Careless Housewife,

"Mr. Indifferent Citizen."

—*May Public Health, Michigan State Board of Health.*

THE TRANSMISSION OF HOG CHOLERA BY BUZZARDS.

(Report of a preliminary experiment.)

By Dr. Charles F. Dawson, Veterinarian, State Board of Health.

It is frequently stated in publications on hog cholera and generally accepted as true that buzzards are an agency for the spread of the disease.

In 1912 Dr. Hiram Byrd and the writer carried out an experiment to determine if buzzards carry the virus of hog cholera in their faeces. The results of this experiment were published in the Annual Report of the State Health Officer, for 1912. We showed that the virus of hog cholera is digested in the intestinal tract of buzzards, and that the droppings of buzzards fed on the flesh of hogs dead from cholera do not produce cholera when mixed in the feed of hogs. The Louisiana Agricultural Experiment Station has demonstrated that some other germs of disease in farm animals meet a like fate in the intestinal tract of buzzards.

While the buzzard does not carry hog cholera in its droppings, it seemed highly probable that the buzzard does carry the virus, not only of hog cholera, but of many other diseases as well, on their feet and feathers, and in their vomitus. To determine the correctness of the views of others, as well as of the writer, the following experiment, approved by the State Health Officer, was carried out: Two high-grade Berkshire pigs weighing about fifty pounds, were procured from the Florida Agricultural Experiment Station, at which place hog cholera has not existed. They were, therefore, susceptible to hog cholera. The pigs were placed in our new animal house, and were the first animals to occupy the veterinary section of the building. In order to exclude the possibility of the pigs having become infected with hog cholera en route from Gainesville to Jacksonville, they were kept under observation for

seven days, during which time they ran a normal temperature, and seemed in normal condition.

Two buzzards were received from Assistant Veterinarian DeMilly, of Tallahassee. These were smeared with hog-cholera virus received from State Veterinarian White, of Tennessee, and were then placed in the stall occupied by the pigs. They were kept in association with the pigs three days. On the second day the birds were removed from the stall and fed meat infected with the Tennessee virus. They were then replaced in the stall, and almost immediately vomited the infected meat. The pigs ate the vomited meat within a few minutes, the boar getting, by far, the larger portion. Therefore, this experiment could only show that the disease is carried by the vomitus, or by the infected feet and feathers. It will be necessary to experiment further to show whether the disease is carried in both ways.

As neither pig died as a result of their association with the buzzards, and as the microbe of hog cholera is unknown, the diagnosis of hog cholera, in this case, must be made from the clinical history, which was that of a mild, acute attack of hog cholera of short duration, such as frequently occurs when hogs are vaccinated by the so-called "double," or "simultaneous method." A post-mortem examination is, in all cases, absolutely necessary to determine if a hog died of cholera.

The following is the record of the experiment:

May 13, 1914. Two pigs received from the Florida Agricultural Experiment Station, and placed in a stall in the new animal house. Fed on corn, bran and shorts slop. Appetite perfect, and animals appear in perfect health.

May 21, 1914. Two buzzards received from Tallahassee. After being infected with virus of hog cholera, received from Tennessee, were placed in the stall with the pigs. Temperature of boar was 102.6° F., and of the sow, 102.2° F.

May 22, 1914. Buzzards were removed from the stall and fed on meat infected artificially with hog-cholera virus, which they ate readily. Buzzards replaced in the stall with the pigs. They soon vomited the infected meat, and the same was eaten by the pigs, the boar getting, by far, the larger share. (It may be remarked here that the ease with which buzzards vomit or regurgitate their food is remarkable, and they do this on the slightest provocation. Handling them will bring about the act. It is probably a provision of nature for lightening their bodies, when it is necessary to suddenly take to flight to avoid danger.)

May 23, 1914. Temperature of boar in the afternoon, 102.3° F.; of the sow, 102.6° F. Buzzards removed, killed and cremated.

May 24, 1914. No observations. (Sunday.)

May 25, 1914. (Fifth day after exposure.) Morning temperature of boar, 102.4° F.; of sow, 103.3° F.

May 26, 1914. (Sixth day after exposure.) Morning temperature of boar, 104.6° F. Afternoon temperature, 104° F. Morning temperature of sow, 102.6° F. Afternoon temperature, 103° F. Both animals languid and somewhat "off feed."

May 27, 1914. (Seventh day after exposure.) Morning temperature of boar, 105.2° F. Sow, 102.5° F. Boar refuses all feed. Sow eats. Eyes of both lose lustre.

May 28, 1914. (Eighth day after exposure.) Morning temperature of boar, 106° F. Afternoon, 106° F. Morning temperature of sow, 103.5° F. Afternoon temperature, 103.5° F. Boar quite sick, eats nothing, and shows some emaciation. Sow eats.

May 29, 1914. (Ninth day after exposure.) Morning temperature of boar, 103.5° F. Afternoon temperature, 102.4° F. Boar is much improved. Returns to his feed. Morning temperature of sow, 103.2° F. Afternoon, 102.7° F. Eats well.

May 30, 1914. (Tenth day after exposure.) Morning temperature of boar, 104° F. Afternoon, 104° F. Morning temperature of sow, 103° F. Afternoon temperature, 102.5° F. Both pigs much improved.

May 31, 1914. (Eleventh day after exposure.) No observations.

June 1, 1914. (Twelfth day after exposure.) Boar's temperature, 102° F. Sow's temperature, 102.2° F.

June 2, 1914. Both pigs seem to have recovered. Both eat well. Boar lost considerable flesh. Sow is in fair condition. Both animals disposed of, as immunes.

STATISTICS.

SMALLPOX.

Reported cases of smallpox in Florida, May, by counties (660 vaccine points distributed):

Alachua	2
Citrus	2
Clay	1
Columbia	6
DeSoto	1
Duval	6
Escambia	3
Hillsboro	14
Lake	2
Marion	2
Polk	1
Volusia	1
Total cases smallpox, May	41
Total cases smallpox, January 1 to June 1, 1914.....	477

RABIES.

Report of rabies in Florida, May, by counties:

	<i>No. Persons Treated.</i>
Duval	7
Hillsborough	5
Jackson	2
Pasco	1
Suwannee	1
Number persons receiving Pasteur treatment, May.....	16
Number persons treated, January 1 to June 1, 1914.....	47

GLANDERS.

No cases of glanders were diagnosed in Florida during May.

Total cases, January 1 to June 1, 1914..... 19

CATTLE TICK ERADICATION—CONSTRUCTION OF DIPPING VATS.

Leon county (at Miccosukee) 1

Volusia county (at Barberville) 1

Number vats constructed, May..... 2

Total number vats constructed in Florida to June 1, 1914.. 38

DISTRIBUTION OF HOG CHOLERA SERUM, MAY, 1914, BY COUNTIES.

<i>County.</i>	<i>C. C. Serum Distributed.</i>	<i>Number of Hogs Serum requested for.</i>	<i>Weight of Hogs to be treated.</i>
Alachua	12,750 c.c.	449	30,780 pounds
Bradford	5,150 c.c.	315	12,200 pounds
Columbia	2,000 c.c.	100	5,000 pounds
DeSoto	2,100 c.c.	75	4,435 pounds
Escambia	1,000 c.c.	48	1,920 pounds
Hamilton	22,300 c.c.	725	58,050 pounds
Hillsboro	5,350 c.c.	196	13,850 pounds
Jackson	19,700 c.c.	793	42,495 pounds
Jefferson	1,400 c.c.	70	3,500 pounds
Lafayette	6,100 c.c.	280	15,700 pounds
Lake	1,900 c.c.	60	4,300 pounds
Leon	3,600 c.c.	203*	15,050 pounds
Levy	1,400 c.c.	55	2,750 pounds
Liberty	1,500 c.c.	75	3,750 pounds
Madison	6,250 c.c.	250	17,400 pounds
Marion	5,900 c.c.	217	9,800 pounds
Pasco	350 c.c.	18	500 pounds
Pinellas	1,250 c.c.	62	3,100 pounds
Polk	400 c.c.	16	740 pounds
Santa Rosa	3,000 c.c.	100	10,000 pounds
Sumter	3,600 c.c.	115	8,850 pounds
Suwanee	6,500 c.c.	291	13,780 pounds
Taylor	2,050 c.c.	150	9,000 pounds
Volusia	2,450 c.c.	115	5,750 pounds
Walton	750 c.c.	34	2,210 pounds
Washington	1,050 c.c.	50	2,400 pounds

Totals 119,800 c.c. 4,862 hogs 297,310 pounds

*Includes 83 hogs, with weight, treated with serum supplied in April to Dr. DeMilly.

SPECIMEN EXAMINATION, BACTERIOLOGICAL LABORATORIES.

	<i>Jacksonville.</i>	<i>Tampa.</i>	<i>Pensacola.</i>	<i>Total.</i>
Animal parasites	376	176	51	603
Diphtheria	77	52	1	130
Gonorrhœa	55	38	27	120
Malaria	240	282	46	568
Pathological	16	12	1	29
Rabies	12	5	...	17
Tuberculosis	162	86	38	286
Typhoid fever	223	194	40	457
Water (for sewage contamination)....	33	3	2	38
Miscellaneous	46	16	24	86
	1,240	864	230	2,334

Grand total number specimens examined by State Board of Health Laboratories, May 2,334

DISTRIBUTION OF DISEASES DIAGNOSED IN MAY.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

—MALARIA—

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Anthony										5
Apopka										3
Arcadia										3
Bartow										3
Bayard										1
Bradenton										1
Bronson										2
Bushnell										1
Callahan										1
Carrabelle										1
Center Hill										1
Citra										12
Clearwater	1									1
Clermont	1									1
Crescent City										1
Crystal River										1
Daytona										4
DeLand										1
Delray										2
Dunnellon										11
Fort Pierce										3
Freeport										1
Gainesville										5
Green Cove Springs..	1									1
Gretna										1
Hawthorne										1
Holder										2
Inverness										1
Jacksonville	9	9	1	2	1	13	11	26	72	1
South Jacksonville..	1									
Jacksonville Release Cultures..	5									5
Key West	1									2
Kissimmee										1
Jasper										1
Leesburg										6
Lake City	1									2
Lakeland										1
Largo	1									1
Live Oak										2
Lulu										1
Malabar										3
Mandarin										1
Mayo										2
Mayport										1
Melrose					1					1
Micanopy										1
Mount Dora										1
Mulberry										1
Carried forward	15	15	1	4	1	33	32	75	176	

Distribution of Diseases Diagnosed in May—Continued.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.
MALARIA

Town.	Diphtheria.	Gonorrhoea.	Estivo-autumnal.	Quartan.	Tertian.	Determined Species not	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Brought forward	15	15	1							176
Myrtle							5	5
Newberry							1	3
New Smyrna							2	2
Ocala				1	8		10	19
Orlando	..	1	1				5		3	10
Oviedo	..								1	1
Plant City	..				2	1	6		10	19
Princeton	..						1		1	2
San Antonio	..						1			1
Sanford	..								1	1
Sarasota	..								1	1
St. Augustine	3								2	5
Sebastian	..								1	1
Starke	..						1			1
Sumner	..	1					1			2
Tallahassee	..				1		5	1	2	9
Trenton	..							1		1
Wauchula	..						1		2	3
Wellborn	..								2	2
West Palm Beach	..						1		2	3
Williston	..						1	1	3	5
Winter Haven	..						1		1	2
Total	18	17	2	..	7	3	67	35	125	274

REPORT OF TAMPA LABORATORY.

Tampa	3	13	..	..	9	3	12	17	6	63
Bartow	..	..				1	1			2
Ft. Myers	..	1						3		4
Arcadia	..						4			4
Plant City	..						3	1		4
Punta Gorda	..						2			2
W. Tampa	..						1		1	2
Port Tampa	..						2			2
Webster	..						1			1
Nocatee	..						4			4
Re-examinations	..						2			2
St. Petersburg	..							2		2
Release Cultures	4	..								4
Safety Harbor	..								1	1
Lakeland	..								1	1
Total	7	14	..	..	9	4	35	20	9	98

REPORT OF PENSACOLA LABORATORY.

Pensacola	..	12	..	..	1	..	1	5	19	38
Milton	..	1	..	..				1		2
Century	..	..	..	..				1		2
Warrington	..	1	..	..						1
DeFuniak	..	..	..	..					1	1
Total	..	14	..	..	1	..	3	5	21	44

Total cases of principal diseases diagnosed by laboratories of the State Board of Health during May:

	Diph-	Gonor-	Tuber-	Uncin-	Total		
	theria.	rhea.	Malaria.	Typhoid.	culosis.	aria.	
Central Laboratory	18	17	12	67	35	125	274
Tampa Laboratory	7	14	13	35	20	9	98
Pensacola Laboratory .....	..	14	1	3	5	21	44
	25*	45	26	105	60	155	416

*Includes 9 release cultures.

VITAL STATISTICS.

BIRTHS AND DEATHS.

First Quarter (January, February, March), 1914.

Reported to the State Board of Health of Florida by the cities of the state of 2,000 population and over. (Subject to correction and revision.)

City.	Estimated Population, July 1, 1913.	BIRTHS.			DEATHS.		
		White.	Colored.	Total.	White.	Colored.	Total.
Jacksonville	67,209	254	209	463	151	208	359
Tampa	46,792	289	66	355	147	63	210
Pensacola	24,682	97	56	153	54	56	110
Key West	20,863	91	33	124	71	29	101
West Tampa	10,174	79	5	84	30	6	36
Gainesville	7,011	18	18	36	13	25	38
Miami	6,701	..	..	..	..	..	..
St. Augustine	5,889	17	1	18	11	6	17
Tallahassee	5,679	10	14	24	1	14	15
Lake City	5,363	..	..	..	..	..	..
St. Petersburg	4,955	24	13	37	43	12	55
Ocala	4,691	6	5	11	5	5	10
Lakeland	4,544	27	8	35	20	5	25
Orlando	4,353	17	11	28	26	12	38
Sanford	4,257	12	15	27	4	8	12
Live Oak	4,031	16	7	23	1	4	5
Quincy	3,968	1	1	2	4	3	7
Palatka	3,933	2	7	9	10	7	17
Fernandina	3,559	3	13	16	4	16	20
Daytona	3,534	8	6	14	10	8	18
DeLand	3,255	12	4	16	7	1	8
Apalachicola	3,062	11	10	21	3	8	11
Plant City	3,052	7	9	16	..	3	3
Fort Myers	2,957	..	..	..	..	..	..
Bartow	2,881	4	3	7	4	..	4
Tarpon Springs	2,754	5	..	5	14	3	17
DeFuniak Springs	2,543	3	..	3	3	2	5
Kissimmee	2,489	18	7	25	2	1	3
Marianna	2,243	8	7	15	1	10	11

Miami has organized a Health Department with a City Health Officer and expects almost immediately to pass an ordinance and collect reports.

Fort Myers has just passed the model ordinance and is expected to begin reporting in the immediate future.

Lake City has ordinance and had Registrar and sent in some incomplete reports but abandoned the work; it is hoped and expected reporting will be resumed shortly.

VITAL STATISTICS.

JACKSONVILLE, FLA., June 20, 1914.

The tabulation of births and deaths in Florida cities of 2,000 population and over for the first quarter of 1914 is the first published result of the plan of collecting vital statistics by the co-operation of municipalities through ordinances, and is a renewal of former published tables which were discontinued in 1906.

The present tabulation includes the reports of twenty-six of the twenty-nine cities eligible; two, Miami and Fort Myers, have not yet started collecting, and one, Lake City, after starting failed to continue. It is confidently expected these three will send in full reports in the near future. Delays by a few cities to transmit reports promptly has prevented this being issued earlier, but it is hoped that all reports in the future will be sent in so promptly that publication of results can be made soon after the tenth of each month.

The next tabulation, for the first half of the year, will be published as soon as can be after receipt of the June reports, and following that it is expected to have each month's results in the earliest succeeding issue of *HEALTH NOTES* possible.

POPULATION FIGURES.

The primary fact for any comparative statement of births and deaths is a showing of the population of each city compared, both past and present, with figures which are comparable with each other and with cities in other states. The United States Bureau of the Census enumerations in decennial years and its estimates for the years between are almost universally used in this country and are adopted for use in this office.

The populations shown in the present tabulation are the estimates for the mid-year, July 1, 1913; in the half year tabulation next to be issued, the estimates for 1914 mid-year will be used.

CHECKS ON ACCURACY.

The average death rate in cities of the registration area—those reporting to the Bureau of the Census—by the last mortality report, 1911, was 15 per 1,000 persons per annum. It can be fairly assumed that the Florida rate will not be lower, and that figure will be taken for the present as a normal minimum.

The Bureau of the Census has not yet established a registration area for births, although it hopes to inaugurate a provisional one in the near future. Therefore no general birth rate can be stated upon its authority, but from published reports of states and cities where birth registration is considered most accurate, it can be safely stated that 20 per thousand is a very low rate, and that figure will be taken as the present assumed minimum for Florida.

These assumed birth and death rates are subject to change both for the cities as a class and for each individual city as the true rates become known.

The accuracy of reports of each Florida city can be partially checked from these minimum figures. To do so the probable death or

birth reports for the year should be found (from the present tabulation by multiplying the quarter's figures by four); the result divided by the population in thousands will be the rate of reported deaths or births per thousand inhabitants per annum. To qualify for admission to the registration area for deaths and have results published, the Bureau of the Census requires at least 90 per cent of all deaths in any locality to be reported; this office will require like accuracy as a prerequisite to payment of registrars.

However, in cities with comparatively small populations there are apt to be large variations and fluctuations in deaths and births in short periods, and the reports of at least six months are needed for safely using this check. In large communities such fluctuations are not so great and both births and deaths are fairly constant, even from month to month.

DEATH RATES.

Florida has four cities of 20,000 and over: Jacksonville, Tampa, Pensacola and Key West. Excepting Tampa, these are within the registration area and report to the Bureau of Census as well as to this office, and their reports of deaths can be assumed to be 90 per cent accurate. These four cities show death rates in even figures as follows: Jacksonville 21, Tampa 18, Pensacola 18, and Key West 19.

Certain of the other reporting cities show rates as high or higher: St. Petersburg 46, Orlando 35, Tarpon Springs 25, Gainesville 22, Lakeland 22, Fernandina 22, Daytona 20, Marianna 19, and Palatka 18. The abnormally high rate of St. Petersburg and Orlando are undoubtedly caused by deaths of nonresidents—winter sojourners—and calls attention to the necessity of following the directions in the circular of June 6, 1914, issued by this office in stating length of residence, so the real conditions of each community can be shown by the death rate of its permanent inhabitants. It is hoped that death certificates will be so carefully prepared that the true resident rates can be given in future tabulations.

Most, if not all, of the cities whose rates are given above require burial permits, and its efficacy as a necessary check on death registration is clearly shown. Each city unquestionably needs at once, if it has not already, an ordinance requiring such permit in accordance with the model suggested from this office.

A large proportion of reporting cities show death rates below 15 per 1,000. Future reports will tend to prove whether these low rates are due to variations and fluctuations, or to incomplete registration. But all cities with such low rates are hereby put on notice that the accuracy of their reports is questioned.

BIRTHS.

There is no such check as the burial permit upon the registration of births, and complete reports can only be secured by ordaining and vigorously enforcing early and accurate reporting, as provided by the suggested model ordinance.

In the four large cities the rates are as follows: Jacksonville 28, Tampa 30, Pensacola 25, and Key West 24. Other rates are as follows: Kissimmee 40, West Tampa 33, Lakeland 31, St. Petersburg 30,

Apalachicola 27, Marianna 27, Orlando 26, Sanford 25, Live Oak 23, Gainesville 21, Plant City 21, and DeLand 20.

It is the general experience that there is greater difficulty in collecting full reports of births than of deaths, but the results above noted show that good collections can be had even in small communities.

Registrars should enlist all possible agencies to see that every birth is recorded. Newspaper notices should be checked, baptismal records examined, and all municipal authorities and employees should be on the alert to gain knowledge of births and notify the Registrar, who should see that they are reported. Ministers, especially colored, should be interested and should give notice to their congregations of the need of reporting births as well as deaths, and each minister should furnish the registrar with monthly lists of deaths and births of which he has knowledge.

PUBLIC SUPPORT.

Every citizen should loyally support the work, which means so much to each community, and boards of trade, civic leagues, woman's clubs, infant welfare societies, and all organizations for the betterment of municipal conditions should stand behind it. Municipal authorities especially should urge it and give it every aid and see that ordinances are enforced without fear or favor.

THE REPORTING OF DISEASE—THE NEXT STEP IN LIFE CONSERVATION.

The above is the title of an article written by Louis I. Dublin, Ph. D., statistician, Metropolitan Life Insurance Company, New York, and just published by the Association of Life Insurance Presidents, 1 Madison avenue, New York.

This publication is one of a series on Public Health and Public Sanitation, including vital statistics, and the association invites those interested to write for the list and copies of any desired.

The extracts given below, from this last issue are especially valuable in Florida at this time:

"VALUE OF SICKNESS REGISTRATION.

"The basis for any campaign against sickness must be an accurate knowledge of its prevalence. Just as the reduction of mortality is furthered by a complete registration of deaths and their causes, so our efforts to reduce the frequency of disease depend upon machinery for reporting the cases of sickness, their causes, and their duration, for each group in the community. For this purpose, it is not sufficient to know only, as we do now, the number who have died from any particular cause. We must henceforth place our emphasis upon the cases of sickness themselves. They are socially more important than deaths and our programme must more and more prevent their occurrence and effect their control. The state must, therefore, in the first instance, see that all preventable diseases are recorded, that we may lay our foundation for efficient sanitary administration.

"Health departments have long realized the importance of registering disease. At first they required the reporting of the plagues such as

smallpox, yellow fever, cholera, etc. Later, the list was extended to include the acute infections, especially those of childhood, like diphtheria, scarlet fever and measles. With the development of the germ theory of disease, the reporting of tuberculosis was included; first on a voluntary, and later on a compulsory basis. Finally, in some of the more advanced states, certain non-infectious disease, such as cancer, pellagra, and even a few of the occupational diseases, have been made reportable. At the present time, nearly all states of the Union have laws requiring the reporting of one or more of the preventable diseases.

"PRESENT STATUS.

"Whatever be the explanation, it is quite clear that at the present time no important aspect of our State health work shows up to such poor advantage as does the registration and control of the preventable diseases. We are here concerned with conditions which are responsible from year to year for large economic and social losses and yet we have only the crudest machinery for checking them. Professor Irving Fisher, of Yale, has estimated that about three million people are seriously ill at any one time in the United States, of whom about a half are suffering from preventable causes. The economic losses from such illness he declares to be no less than five hundred million dollars annually in wages and an equal sum in doctor's fees, drugs and other necessary medical accessories. These figures, he believes, are conservative; but it is obviously impossible to make any estimate which will approximate the truth in view of the total absence of reliable information. In fact, there are no records of illness in this country excepting the very fragmentary reports of a few states and some corporations. Whatever be the exact amount of loss sustained through sickness, effective registration will help materially to reduce it and will thus yield a big return to the communities on the relatively small investment required.

"EFFECT UPON PUBLIC WELFARE.

"In spite of the fine possibilities that the registration of morbidity promises, the actual conditions, as we have already pointed out, are far from satisfactory. Not one state in the entire country has made adequate provisions for this important branch of its health work and the largest number have just begun to make any advances in the field. In view of this situation, the Surgeon-General of the Public Health Service and the state health officers, assembled in their annual conferences for the discussion of health matters, have during the last few years directed their attention to this problem. After a series of annual reports and resolutions, the standing committee on the subject formulated plans for appropriate legislation. The committee carefully examined the entire subject and at the eleventh conference, held in Minneapolis on June 16, 1913, submitted, provisionally, a model bill. This, it was hoped, would bring about uniform and complete reporting of the preventable diseases in all of the states of the Union. The bill received the attention of the conference members, and, after a thorough analysis, was adopted unanimously and recommended for introduction into the various state legislatures."

P.H.R.

FLORIDA



Health Notes

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No. 7 (New Series)

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State Board of Health Building,
Springfield Boulevard,
Jacksonville.

BRANCH LABORATORIES:
State Board of Health Building,
Florida Avenue and Constant Street, Tampa.
City Hall, Pensacola.

Sent to any address in the State for the asking.

If you receive it without asking, it means that someone else has requested it for you.

When you change your address drop us a card.

When giving change of address, give both the old and the new.

Anything you want to know about the public health we will try to tell you.

Any information you want about communicable diseases of domestic animals we will help you to get.

Address communications to Jacksonville, Fla.

The story of typhoid may be told in six words—FILTH, FINGERS, FLIES, FOOD, FEVER, FUNERAL.

A LESSON FROM PLAGUE.

A disease is never without terror save in its own country. The *unknown* or *unusual* inspires a fear which is seldom aroused by dangers with which one is more or less familiar, no matter how grave those dangers may be. This very familiarity with the danger causes it to be ignored.

When several cases of bubonic plague were reported recently in New Orleans the alarm spread over the entire country and vigorous procedures were immediately instituted to prevent its introduction into other states. Plague is almost unknown in this country and is, therefore, awe-inspiring.

All these efforts toward plague prevention and rat extermination are well and good—in fact, they are absolutely *necessary* and should be encouraged and extended; but there are other diseases which also demand attention.

We become panic stricken at the thought of a few cases of plague, yet we sit calmly by and allow consumption, typhoid and malaria (all of which are *preventable* diseases) to take their annual toll of thousands of lives. Why? Because they are diseases with which we are familiar and they have come to be regarded rather as a matter of course.

If bubonic plague should claim ten victims in Florida the whole state would be thrown into a panic, yet hundreds of times this number of deaths are caused annually by typhoid and tuberculosis without calling forth even passing comment. We fold our hands and "trust to luck," disregarding the simple preventive measures, and when some loved one dies we shed a few tears and blame it all on "Providence."

Shall the work toward plague prevention be continued? *By all means*—it should be continued with renewed vigor. But at the same time let us become more interested in the graver dangers of the common, every-day diseases which we have always with us. C. H. D.

NOTES ON PLAGUE.

In a recent article on "The Reappearance of Plague In the Philippines After An Absence of Six Years," by Dr. Victor G. Heiser, of the United States Public Health Service, among other interesting remarks and data given the doctor says: "Plague *not* a filth disease."

"Our experience in the Philippines shows that plague is not a filth disease. A well-to-do citizen is as liable as the slum dweller to become infected if rats infest his house or other places that he frequents. In Manila some of the worst slum sections of the city escaped; on the other hand, some of the better sections in which there were large stores of food which attract rats became infected."

All of which goes to prove that in order to be safe from plague invasion a systematic crusade must be waged against rats, and all buildings and docks must be made rat proof.

A GOOD INVESTMENT.

What is a life worth? What value does the average Floridian place upon his life and the lives and health of his family? Is their protection worth the expenditure of from fifteen to thirty dollars?

It would seem that this question could be unhesitatingly answered in the affirmative, but a glance at the average conditions prevailing in the state seems to show that the general belief is to the contrary.

A study of typhoid outbreaks in this state and elsewhere shows that in about ninety per cent of all cases this disease is carried by *flies*. Thorough screening of all earth closets and homes will probably reduce typhoid fever at least seventy-five per cent.

Again, it is positively known that malaria is transmitted from one person to another *solely* by the *anopheles* mosquito — another disease that is preventable by thorough screening.

Yet, in spite of this convincing evidence of the necessity of screening, the majority of Florida homes — especially the rural homes — remain unscreened and the antiquated, semi-barbaric, open surface privy still prevails outside of the sewered districts.

Statistical experts estimate that the average cash value of a human life is about \$3,500. Allowing five souls to each family, this means that the lives in each Florida home aggregate about \$17,500. This home can be screened and these lives protected at a cost of from fifteen to thirty dollars. Aside from the expense of sickness, and the suffering and anguish, which can not be calculated in dollars and cents, this is rather cheap insurance, isn't it?

Here is the proposition: an expenditure of from \$15 to \$30 will protect, in a large measure, lives worth \$17,500. Sounds like a pretty good investment, doesn't it?

C. H. D.

AN INQUIRY IN REGARD TO CESSPOOLS.

To Health Notes:

If one is not within easy reach of a sewerage system, is what is known as a "cesspool" a good substitute? What I mean is: a deep pit with clay bottom and sides walled with boards, and dirt and boards above, with a pipe from a "toilet" conveying toilet matter into the pit, and a pipe above as a "vent" into the air. I mean just such a vent as is used where there is sewerage. Is it better than just the ordinary country privy? Will the vent from the cesspool pollute the atmosphere?

Truly,

"INQUIRER."

While such a cesspool as is described above is undoubtedly a great improvement over the ordinary open surface privy commonly in use in the rural districts, it is by no means a good substitute for a sewerage system. It has the virtue of preventing the access of flies to the excreta; but on the other hand is a source of danger through the possibility of pollution of a surface water supply.

The possible pollution of the atmosphere from the cesspool vent is of no importance from a health standpoint, though it might give rise



(112)

HOW FLIES CARRY TYPHOID GERMS ON THEIR FEET.

Fly-tight privies and well-screened houses will do much to keep typhoid away. Courtesy Indiana and Georgia State Boards of Health.

to rather unpleasant or offensive odors. Where such a vent is used it should be extended upward above the level of the highest windows of the dwelling, thus allowing the gases to escape upward and doing away with any annoying odors. The excess of oxygen in the atmosphere will destroy by oxidation any injurious matter which might escape from the vent.

A much better substitute for sewerage than the cesspool is a well constructed *fly-proof* surface privy provided with water-tight buckets or tubs. The L. R. S., or "wet barrel type" of privy is an even more efficient substitute. Or, if financial considerations permit, the best of all is the septic tank.

All of these methods of sewage disposal are described in the State Board of Health publication, "Sewage Disposal for Rural Homes."

BUT WHY NOT NOW?

"Better late than never" is such a venerable and time-honored adage that its truth is seldom questioned. As a matter of fact, it *is* true; but how much better it is to be *early*.

The State Board of Health is urging upon the people of Florida the importance of anti-typhoid vaccination in the prevention of the spread of this disease, and is furnishing this preventive free to all citizens of the state who are unable to pay for it.

Yet comparatively few avail themselves of this advice or of this offer of free vaccination. The prevailing tendency seems to be to *wait* until an alarming number of cases or an epidemic occurs in the community before taking any steps toward prevention — in a word, to follow the better-late-than-never plan.

Doesn't it seem that the *logical* course is to prevent the epidemic *before it occurs?* It is *better* to be late than never, but isn't it *best* to be *early*?

C. H. D.

PHYSICIANS OF THE STATE WILL PLEASE READ CAREFULLY AND HEED

The suggestions which Dr. Henry Hanson, the senior bacteriologist of the State Board of Health, makes in regard to packing and shipment of specimens to the different laboratories operated by the State Board of Health at Jacksonville, Tampa, and Pensacola.

REGARDING LABORATORY SPECIMENS.

Some suggestions as to packing, shipment, etc., with extracts from monthly report of Dr. Henry Hanson, Senior Bacteriologist.

In sending specimens of any kind to the laboratory they should be collected and shipped in the containers provided for the purpose by the State Board of Health, and all information relative to the specimen should be given on the regulation data blanks which will be furnished on request.



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WATER.

"When a sample of water is collected in a container, which is not properly sterilized, and is not collected with precautions which will insure it against accidental contamination the analysis is of no value as a check upon the actual condition of the water examined. We, therefore, urge on the patrons of the state laboratories that they be more careful in securing proper containers before sending in a sample of water for bacteriological examination, and also to use every precaution while collecting the sample to prevent the accidental contamination spoken of.

*"There is no occasion for bacteriological examination of water unless there is some water-borne disease present. In such instances the State Board of Health should be asked to send one of its trained representatives to inspect the premises and determine whether or not there is any evidence that the water is responsible for the prevailing conditions. The sample should be collected by the person making this inspection. * * **

"Water should be iced for shipment whenever possible in order to prevent the development of the saprophytic bacteria, which are often found in water. Samples should be collected as shortly as possible before the shipping time * * * and, if there is a morning and an evening train, should be expressed at night so as to bring them to Jacksonville in the morning, which would often save a day's time in the express office." * * * For the same reason, specimens should never be sent to the laboratory on Saturday.

RABIES.

"In regard to rabies * * it is very undesirable to receive cats' heads or dogs' heads by parcel post since they are never iced and arrive in the laboratory in such condition that we are often unable to make a proper examination. * * * Wherever possible the same precautions should be observed as with specimens of other kinds. Select such time for sending them that the least possible time will intervene between the time of sending and the time the specimen can be delivered at the State Board of Health Laboratory.

"I also wish to recommend in this connection, that persons living outside the city do not bring animals to the laboratory for observation. * * * An animal which in anger or play or for some other reason happens to bite an individual could be chained or caged and kept under observation *at home*. An animal which is in the beginning stages of rabies will in most cases show undoubted symptoms in from three to five days, and in fact most of them will die in that time if they have rabies. When unmistakable symptoms are exhibited * * (or the animal dies) the head can be sent to the laboratory for examination. * * * Where the animal does not show any symptoms in five or ten days all anxiety should cease. * * *

"Further, if such animals after a period of two or three weeks become rabid there is no occasion for alarm by the persons who were bitten two or three weeks previously because the animal did not have rabies in the infective stage two or three weeks before the symptoms developed. * * *

* * * "Again I wish to urge that *people should not make the mistake of killing the animal as soon as a person has been bitten.* * * * This * * * is all right if the animal shows some definite symptoms of being sick or has symptoms which strongly point to rabies, but if it shows no symptoms aside from being cross, or no symptoms at all, it should be observed for such time as has been specified above before it is either released or killed."

PATHOLOGICAL SPECIMENS.

"In regard to pathological specimens I also wish to ask that the physicians in the state, who are using the laboratory for diagnosis of tissues removed at operations, be careful to preserve their samples in seventy per cent alcohol as soon after operating as possible and send them to the laboratory in a sufficient quantity of this fluid to thoroughly prevent decomposition. Where tumors are removed the *entire specimen* should be sent in in order that the pathologist may have a 'fair show' in selecting the area which shows a malignant condition if such condition exists. We often get tissues accompanied by a history suggestive of malignancy but the specimen of tissue is so small that we are unable to arrive at a proper diagnosis, where the specimen consists simply of either fatty or normal connective tissues which in that case may mean nothing so far as the diagnosis is concerned."

MALARIA.

In collecting specimens of blood for examination for malaria, care should be taken to secure a smooth, even smear — not too thick. Follow carefully the instructions printed upon the reverse side of the data blank. Avoid putting the wet surfaces of blood smears in contact with each other or with other objects. Smears should be allowed to dry thoroughly before being placed in the container.

SPUTUM.

Specimens of sputum should be collected early in the morning before food has been taken by the patient. The more solid portion of the sputum should always be selected rather than the thinner fluid portion.

HEALTH.

"Health is a state of physical, mental and moral equilibrium, a normal functioning of body, mind and soul. It is the state when work is a pleasure, when the world looks good and beautiful, and the battle of life seems worth while. Health is the antithesis of disease, degeneration and crime.

"The laws of health are as inexorable as the law of gravitation, as exacting as eternal justice, as relentless as fate, and their violation is the beginning and cause of all diseases, suffering and sin.

"Health is the most desired of earthly blessings. When finally lost it can not be purchased by uncounted millions, restored by the alienist, or returned by the pulpit.

"Health is that state of happiness, faith and love whose prototype was the first man — Adam; whose ideal is the Christ."

S. J. CRUMBINE, M. D.

Topeka, Kan.

COMBATING VACCINATION.

(The following editorial from the Tampa Times of July 13, 1914, is so worthy of commendation that it is printed in full. It is gratifying to note that one of the state's leading newspapers is endorsing a policy which the State Board has been advocating and pleading with the people to accept for the past fifteen years.)

"Although the medical profession has been for many years — ever since in fact, it was discovered — well-nigh unanimously in favor of vaccination against smallpox, there has always been, and is still, considerable opposition to it. This has taken form in the organization of a society that has many local branches, that has been active in antagonizing the practice.

"Although the prevalence of the loathsome disease has been immeasurably decreased since the general introduction of vaccination until it is now no longer dreaded as it used to be the efforts of those who oppose it have not been relaxed.

"Many of those who do not actively manifest hostility to the actual practice of inoculation and who really recognize its preventive efficacy, fight against the compulsory feature which exists in many states and cities, as infringing upon the personal liberty of the citizen. To this phase of the matter is principally directed the activities of the anti-vaccination society in the city of New York.

"This society is extremely active and appears to be abundantly financed. It has been pursuing a very aggressive campaign, running quarter and half-page advertisements in the principal newspapers, which, as every one is aware, is an exceedingly expensive method of agitating.

"This society, through its agents, watches the operations of the health authorities and the doctors very closely and in every instance of serious or fatal results ensuing from vaccination, which are mostly imaginary, they are conspicuously exploited in headlines so that they may not escape the attention of the public.

"One of the most recent, and most famous, cases that the anti-vaccination people have gotten hold of is that of Madame Nordica. The anti-vaccination society in its publications positively asserted that she died from poison imparted by the vaccine virus. This has been most positively and indignantly denied by her physicians and the members of her family, and is in all probability entirely untrue. Assertions, however, nearly always out-travel denials, and it will doubtless be so in this case.

"With experience, though, in the use of this preventive means, faith in it spreads and increases and nothing would induce the health authorities or the medical profession to discontinue its use. Its discovery

was undoubtedly a blessing to mankind as has been the extension of the inoculation idea to the prevention of other diseases, of which typhoid fever is the most recent and conspicuously successful instance."

MALARIA IN FLORIDA.

Dr. R. H. von Ezdorf, Surgeon, United States Public Health Service, who has for some time past been engaged in a malarial survey of the southern states, kindly furnishes the following interesting data:

Summary of Postal Card Statistics for Florida for April, 1914.

Number of cards mailed	958
Number of cards returned unclaimed	5
Number of reply cards received.....	120
Number of places represented in replies.....	74
Percentage of reply cards received	12.52
Number of counties represented in replies.....	36
Number of counties not heard from.....	14
Number of cases treated:	
White	311
Colored	134
Total	445
Average number of cases per physician reporting.....	4

<i>Types of Infection Prevailing:</i>	<i>Counties.</i>
Tertian	11
Quartan	1
Estivo-autumnal	1
Tertian and Quartan	4
Tertian and Estivo-autumnal	8
Quartan and Estivo-autumnal	2
Tertian, Quartan and Estivo-autumnal	5
None	2
Not stated	2
No report	14
	—
	50

Diagnosis Confirmed Microscopically:

Tertian	10
Quartan	1
Estivo-autumnal	1
Tertian and Quartan	1
Tertian and Estivo-autumnal	4
Quartan and Estivo-autumnal	0
Tertian, Quartan and Estivo-autumnal	2
None	14
Not stated	3
No report	14
	—
	50

Number of Cases Confirmed Microscopically:

Tertian	56
Quartan	9
Estivo-autumnal	24
	—
	89

MALARIA IN FLORIDA—Continued.

Number of physicians using microscope.....	25
Number of counties in which microscope used.....	19
Number of chronic cases	74
Number of physicians reporting chronic cases	32
Number of counties in which chronic cases reported.....	22
Number of cases reported in children under 15 years.....	119
Percentage of cases reported in children under 15 years.....	26.74

Mosquitoes Reported Prevailing:

	<i>Counties.</i>
Anopheles	14
Anopheles and Culex	5
Anopheles, A. calopis and Culex.....	1
Culex	3
Unknown	10
None	3
Not stated	0
No report	14
	<hr/> 50

Breeding Places for Mosquitoes:

Breeding places for mosquitoes reported to exist in.....	31
None in	2
Not stated in	3
No report from	14
	<hr/> 50

Prophylactic Measures:

Oil, drainage, screens, quinine, mosquito nets, destruction of breeding places, general sanitation, education, etc., etc., reported in.....	25
None in	9
Not stated in	2
No report from	14
	<hr/> 50

STATISTICS.

SMALLPOX.

Reported cases of smallpox in Florida, June, by counties (1,817 vaccine points distributed) :

Alachua	1
Duval	2
Hillsborough	13
Lake	1
Pinellas	1
Putnam	1
Volusia	1
Total cases smallpox, June.....	20
Total cases smallpox, January 1 to July 1, 1914.....	497

RABIES.

Report of rabies in Florida, June, by counties:

	<i>No. Persons Treated.</i>
Alachua	1
Clay	1
Duval	3
Marion	2
St. Johns	1

Number persons receiving Pasteur treatment, June.....	8
Number persons treated, January 1 to July 1, 1914.....	55

GLANDERS.

Report of cases, by counties, June:

Duval	1
Total cases, January 1 to July 1, 1914.....	20

CATTLE TICK ERADICATION—CONSTRUCTION OF DIPPING VATS, JUNE.

DeSoto county (at Ona)	1
Total number vats constructed in Florida to July 1, 1914.....	39

HOG CHOLERA SERUM ADMINISTRATION, JUNE, 1914, BY COUNTIES.

County.	C. C. Serum Distributed.	Number of Hogs		Weight of Hogs to be treated.
		Serum requested for.		
Alachua	9,850 c.c.	385		25,250 pounds
Baker	650 c.c.	33		1,650 pounds
Bradford	13,050 c.c.	575		33,375 pounds
Citrus	1,500 c.c.	75		1,875 pounds
Columbia	1,500 c.c.	75		3,750 pounds
DeSoto	6,350 c.c.	317		14,950 pounds
Hernando	650 c.c.	25		1,500 pounds
Hillsboro	3,500 c.c.	150		8,500 pounds
Jackson	18,700 c.c.	935		39,175 pounds
Lafayette	2,300 c.c.	100		5,000 pounds
Lake	2,350 c.c.	93		5,300 pounds
Levy	2,500 c.c.	120		6,200 pounds
Liberty	4,800 c.c.	220		10,800 pounds
Marion	11,200 c.c.	541		27,900 pounds
Santa Rosa	4,700 c.c.	145		10,900 pounds
St. Johns	3,100 c.c.	117		9,100 pounds
Suwanee	3,400 c.c.	145		7,150 pounds
Volusia	300 c.c.	15		480 pounds
Walton	1,200 c.c.	60		2,400 pounds
Totals	91,600 c.c.	4,126 hogs.		215,255 pounds

STATISTICS—Continued.

SPECIMEN EXAMINATION, BACTERIOLOGICAL LABORATORIES.

	Jacksonville.	Tampa.	Pensacola.	Total.
Animal parasites	260	159	63	482
Diphtheria	151	34	25	210
Gonorrhœa	57	33	43	133
Malaria	291	261	78	630
Pathological	7	10	..	17
Rabies	12	3	..	15
Tuberculosis	152	92	32	276
Typhoid fever	320	191	81	592
Water (for sewage contamination)	32	5	..	37
Miscellaneous	44	30	8	82
 Totals	 1,326	 818	 330	 2,474
Grand total number specimens examined by laboratories of the State Board of Health during June, 1914				2,474

DISTRIBUTION OF DISEASES DIAGNOSED IN JUNE.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

Town.	Diphtheria.	Gonorrhœa.	MALARIA			Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
			Estivo-autumnal.	Quartan.	Tertian.					
Alachua	1	..	1
Anthony	1	1
Apalachicola	1	..	1
Alton	2	..	2
Arcadia	1	..	..	..	..	1
Archer	1	1
Bartow	1	..	..	..	..	..	1	1	..	3
Bell	1	1
Belleview	5	5
Bronson	1	1
Bushnell	2	..	..	2
Citra	4	4
Chipley	1	..	1
Christina	1	..	..	..	1
Clearwater	1	..	..	..	1
Cocoa	1	..	..	..	1
Coleman	1	..	..	..	1
Daytona	1	2	..	..	..	3
DeFuniak Springs	1	..	..	..	..	..	..	..	..	1
DeLand	1	1	2
Delray	2	2
Dowling Park	1	..	..	1
Dunnellon	9	9
Dupont	1	..	..	1
Emporia	1	..	1
Fairfield	2	..	..	1
Fernandina	1	..	..	2
Ft. Ogden	1
 Carried forward	 1	 1	..	..	2	 ..	 14	 8	 26	 52

Distribution of Diseases Diagnosed in June—Continued.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

—MALARIA—

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Determined Species not	Typhoid.	Tuberculosis.	Uncinaria.	Total.
<i>Brought forward</i>	1	1				2	14	8	26	52
Ft. Pierce									1	3
Gainesville		1								4
Greensboro							3		1	1
Green Cove Springs	2									2
Hawthorne	1									1
Inglis									3	3
Jasper								1		1
Jacksonville	10	12			7	2	28	17	19	95
South Jacksonville						1				1
Lakeland								1		1
Lebanon									5	5
Leesburg							1		1	2
Lemon City		1								1
Live Oak					1		3	2	2	8
Malone								1		1
Mandarin									2	2
Mayport						1				1
Melbourne							1			1
Miami							1			1
Micanopy							2			2
Moultrie									4	4
Mulberry						1		2		3
Newberry									1	1
New Smyrna									1	1
Ocala							3		1	4
Okeechobee									1	1
Orlando		1			3		12	1	4	21
Oxford									1	1
Pine									3	3
Plant City	2				1	1	5	1		11
Princeton						1				1
Punta Gorda							1			1
Quincy							1		1	2
Sanford	2									2
St. Augustine							1	1	5	7
Starke							1			1
Sumner		1								1
Tallahassee							5	1		6
Titusville							2			2
Trenton								1		1
Wauchula									1	1
Welaka									1	1
Williston							2		3	5
Total	18	17			13	8	86	39	88	269

Distribution of Diseases Diagnosed in June—Continued.

REPORT OF TAMPA LABORATORY.

—MALARIA—

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quarten.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Tampa	3	10			10			12	8	51
West Tampa		1						4	2	11
Wauchula								1		4
Lakeland								1		2
Mulberry										1
Reexaminations										2
Plant City	1								1	2
Thonotosassa									1	1
Kathleen									1	1
Fort Ogden								1	1	2
Riverview									1	1
Bartow		1							1	2
Brandon								1		1
Limona								1		1
Largo					1					1
Total	4	12			11		14	22	20	83

REPORT OF PENSACOLA LABORATORY.

Pensacola	9	..	..	1	7	21	5	23	66
River Junction .....	..	..	..	..	..	1	..	..	1
St. Andrews .....	..	..	..	..	..	..	..	1	1
DeFuniak Springs	4	..	..	..	..	..	1	..	5
Quincy .....	..	..	..	..	..	3	..	2	5
Bagdad .....	..	..	..	..	..	1	1	..	2
Munson	1	..	..	..	..	..	..	..	1
Milton .....	..	..	..	1	..	..	..	..	1
Sneads .....	..	..	..	..	1	..	..	..	1
Total	4	10	..	2	8	26	7	26	83

Total cases of principal diseases diagnosed by laboratories of the State Board of Health during June:

	Diph- theria.	Gonor- rhœa.	Malaria.	Typhoid.	Tuber- culosis.	Uncin- aria.	Total.
Central Laboratory..	18	17	21	86	39	88	269
Tampa Laboratory..	4	12	11	14	22	20	83
Pensacola Laboratory	4	10	10	26	7	26	83
Total for State.	26	39	42	126	68	134	435

LICENSED EMBALMERS.

The following is the list of embalmers licensed by the State Board of Health of Florida, May 25, 1914, having successfully passed the examination of that date:

<i>License Number.</i>	<i>Name.</i>	<i>Address.</i>
141	C. E. Henderson	Tampa, Fla.
142	Jas. Washington (colored)	Jacksonville, Fla.
143	Willis R. Tomlinson	Jacksonville, Fla.
144	E. L. Morgan	Arcadia, Fla.
145	G. B. Overton	Plant City, Fla.
146	Leonard F. Sanchez	St. Augustine, Fla.
147	Carey Hand	Orlando, Fla.
148	J. L. McClelland	Punta Gorda, Fla.
149	Jno. R. Johnson	Jacksonville, Fla.
150	Mrs. Lillian E. Bruce	St. Petersburg, Fla.
151	Kelsey L. Pharr (colored)	Miami, Fla.
152	Wm. S. Smith	Clearwater, Fla.
153	S. R. Pyles	Jacksonville, Fla.
154	D. N. Disbennett	New Smyrna, Fla.
155	Levin King Vinson	Tarpon Springs, Fla.
156	Andrew Froscher, Jr.	Titusville, Fla.
157	R. E. Goodman	DeLand, Fla.
158	D. C. Thompson	St. Cloud, Fla.
159	Wm. C. Cooper, Jr.	Jacksonville, Fla.
160	Edw. W. Williams (colored)	Jacksonville, Fla.
161	Lionel Brazelton	Tampa, Fla.

THE MODEL ORDINANCE FOR REGISTRATION OF BIRTHS AND DEATHS.

In the latter part of April last this office prepared a Suggested Ordinance for birth and death registration, with a circular letter calling attention to the need of uniformity in such municipal legislation and the necessity of requiring a permit for the burial or removal of any human body.

This suggested draft was prepared from one sent out by the Bureau of the Census and contains the essentials, in brief form, of the Model State Law for the registration of births and deaths advocated and endorsed by the American Medical Association, the American Public Health Association, the American Bar Association, and other national organizations and societies, as well as by the United States Children's Bureau and Bureau of the Census.

The ordinance places the duty of obtaining and filing the death certificate where it really belongs, upon the undertaker — the one most concerned with the burial or removal, and in reality makes the permit a receipt for the certificate.

It also provides for the prompt reporting of births — within three days,—and finally it makes it the duty of the city clerk or other municipal officer selected, to receive reports, issue permits, transmit certificates monthly to this office, and most important — enforce the law.

This Model Ordinance and the circular have been distributed broadly in the Florida registration cities and sent to many interested persons

elsewhere in the state. The interest it has aroused and the favorable manner in which it has been received will be seen by inspection of the following table of the action taken upon it in those cities.

Cities in which burial permits were required previous to April, 1914:

Jacksonville.	Key West.	Orlando.
Tampa.	St. Augustine.	Palatka.
Pensacola.	St. Petersburg.	Fernandina.

(And possibly a few others.)

Cities which since April, 1914, have adopted the model ordinance, or its essentials, some with slight alterations:

Gainesville.	Quincy.	Fort Myers.
Tallahassee.	Fernandina.	Tarpon Springs.
Ocala.	Apalachicola.	DeFuniak Springs.
	Plant City.	

Cities expecting to pass the model ordinance soon, or considering its passage in the near future:

Miami.	Lake City.	DeLand.
*St. Augustine.	Lakeland.	Bartow.

Cities having no ordinances, or no requirement for burial permit, which should pass the Model Ordinance at once:

West Tampa.	Palatka.	Kissimmee.
Live Oak.	Daytona.	Marianna.

It is needless to say that the passage *alone* of the ordinance will not secure results — it is necessary to *enforce* it. However, as far as deaths are concerned, the burial permit almost automatically ensures complete reports, unless, of course, the ordinance is allowed to become a dead letter.

Births are a more difficult matter and there being no similar check for them, as the burial permit for deaths, each city, its officials and its citizens, will have to carefully watch that the law is vigorously enforced by the official charged with the duty.

The uniform enactment of this Model Ordinance by Florida cities, primarily the registration cities, and afterwards by all which desire to know, and better their health conditions, will be a long step towards state legislation and eventual statewide statistics.

VITAL STATISTICS IN SMALL CITIES.

"Fortunately the gathering of vital statistics is not beyond the power of the kind of health officer that is found in small cities and in rural communities. If years of study of mathematics and of the statistical method were required, we should despair of obtaining light within a century. But the facts we want are, for the most part, common, everyday facts, easily recognizable even by laymen; for example, births, deaths, age at death, causes of death, cases of transmissible diseases, conditions found upon examination of children applying for work certificates, etc. Where expert skill is required, as at state and national

*Model Ordinance in course of passage.

headquarters, it can be found. Every layman can train himself to use skillfully the seven ingredients of the statistical method which it is his duty to employ, and to know when to pay for expert analysis and advice. We can all learn to base judgment of health needs upon the seven pillars,—desire to know, unit of inquiry, count, comparison, percentages, classification, and summary.”—From “*Civics and Health*,” Dr. Wm. H. Allen.

“VITAL STATISTICS— A DISCUSSION OF WHAT THEY ARE AND THEIR USES IN PUBLIC HEALTH ADMINISTRATION.”

The above is the title of a lately issued pamphlet by Dr. John W. Trask, Assistant Surgeon General, United States Public Health Service, which covers in concise but remarkably able manner the wide field indicated by its title.

In its appendix are the texts of the Model State Laws for the registration of births and deaths, and for morbidity reports, the former of which has been so generally adopted, and the latter, a more recently advocated uniform measure, having already been passed in some states and now being under favorable consideration in many more.

This office has received a supply of this publication and will be glad to furnish copies to those interested and writing for it.

What Dr. Trask has to say of some of the uses of these statistics is of such value that extracts are here reprinted:

“USES OF BIRTH REGISTRATION AND STATISTICS.

“Birth statistics are of use in ascertaining the natural increase of the population (excess of births over deaths). They also give valuable information regarding the effective fertility or fecundity of the race and of the frequency of illegitimacy. These matters are of interest to the economist and the statesman. The possession of birth statistics also furnishes the basis for the present accepted means of stating the infant mortality rate, as will be explained later. The data from which the statistics are made, the registered births, are on the other hand of value to the community in many ways, and to the health officer among others may be especially useful. Some of the uses will be enumerated.

“*Legal record.*—The registration of a child’s birth forms a legal record that is frequently useful and may be of the greatest importance. It establishes the date of birth and the child’s parentage and legitimacy. It may be required to establish the child’s age for attendance at public schools, for permission to work in states where children below a certain age are not allowed by law to be employed; to show whether a girl has reached the age of consent, whether individuals have attained the age when they may marry without the parent’s permission; to establish age in connection with the granting of pensions, military and jury duty, and voting. It may be necessary in connection with the bequeathing and inheritance of property or to furnish acceptable evidence of genealogy, and in fact may be important and useful in possible events too numerous to mention.

"Uses in public health administration.—Registration of births shows where the babies are and makes possible such observance and protection as the health department desires to extend. With birth registration it would be possible for the health authorities to see that the babies are vaccinated against smallpox. This is one of the uses made of registration in England. It would also be possible to see that the babies in poor families have proper food and adequate attention. The observation of infants under two weeks of age would bring to light some cases of ophthalmia which otherwise might cause serious injury to vision and at times total blindness."

"USES OF DEATH REGISTRATION.

"Death registration serves a number of highly important purposes. Its functions are legal, economic, and social. Death registration is useful in preventing and detecting crime through the restrictions placed upon the disposal of dead bodies. It serves as evidence in the inheritance of property and in the settlement of life insurance contracts and policies. It is only proper that the time, place, and cause of death of each individual should be made a permanent record for both sentimental and legal reasons.

"Death registration makes it possible to show by mathematical computations and statistical methods the extent and rate of change in population produced by deaths; the average duration of life; and, to the extent that the certified causes of death have been correctly stated, the relative frequency with which the several causes produce death. Death statistics by comparison with birth statistics give useful information regarding population increase or decrease."

"USES OF MORBIDITY REPORTS AND STATISTICS.

"In health administration, morbidity reports — that is, reports of cases of sickness — serve several purposes, which may be briefly stated to be as follows:

"1. In the communicable diseases morbidity reports show the occurrence of cases which constitute foci from which the disease may spread to others, as in scarlet fever, typhoid fever, tuberculosis, or yellow fever, and make it possible to take proper precautions to protect the family of the patient, his associates, or the community at large.

"2. In some diseases morbidity reports make it possible to see that the sick receive proper treatment, as in ophthalmia neonatorum, diphtheria, and, in certain cities, tuberculosis. The reporting of cases of ophthalmia in the newborn makes it possible to save the sight of some infants who would otherwise not receive adequate treatment until after much damage had been done. In diphtheria the health department can be of service in furnishing antitoxin. Some cities furnish hospital or other relief to consumptives who would otherwise be without proper treatment.

"3. In diseases that are not communicable, such as those due to occupation or environment, reported cases show the location of conditions which are causing illness or injury. This makes it possible to remedy the faulty conditions, so that others may not be similarly injured.

"4. In certain diseases, of which the cause or means of spread is unknown, morbidity reports show their geographic distribution and varying prevalence and the conditions under which cases occur. This information has great potential value in attempts to ascertain their causes and means of spread.

"5. Reports of the occurrence of disease are necessary to show the need of certain sanitary measures or works and to control and check the efficiency of such measures or works when put into operation. In pulmonary tuberculosis such reports show the number of consumptives in the community and the need of sanatoria. In malaria they show the prevalence of the disease, the need for drainage and other anti-mosquito work, the efficiency of such work when in operation, and when a change in the prophylactic measures or additional ones are necessary. In typhoid fever they show faults in the water supply or in the control of the production and distribution of milk or in the disposal of excreta in special localities.

"6. Morbidity reports when recorded over a period of time and properly compiled become a record of the past occurrence of disease. They show the relative prevalence of disease from year to year and under varying conditions. They show the effect of the introduction of public-health measures and of sanitary works. They give a history of disease not obtainable in their absence."

VITAL STATISTICS NATION'S BIG NEED.

From *The Insurance Field*.

(HEALTH NOTES reprints this from the Bulletin of the Texas State Board of Health, because of the interest lately evinced by those connected with life insurance in Florida.)

That the Association of Life Insurance Presidents will concentrate its endeavors along health reform lines in a movement for the enactment and enforcement of adequate vital statistics registration laws in the United States is disclosed by the report of its health committee, adopted by the association at its recent sixth annual convention. This report, which was presented by Chairman F. W. Jenkins, president of the Security Mutual Life of Binghamton, N. Y., was not given out for publication until this week, because further data had to be obtained from the United States Census Bureau for the completion of a registration area map of this country, which accompanies the report.

TO WORK WITH CENSUS BUREAU.

The work of the association will be largely in co-operation with the United States Census Bureau, which is advocating a standard form of registration throughout the country, and with the constituted authorities of those states where there is not adequate registration at present.

The report is signed by all of the members of the health committee, who, besides Chairman Jenkins, are as follows: J. R. Clark, president Union Central Life; W. F. Dix, secretary Mutual Life of New York; J. L. English, vice-president Aetna Life; John K. Gore, vice-president.

and actuary Prudential; Dr. A. S. Knight, medical director Metropolitan Life, and Edgar S. Scott, president Franklin Life of Springfield, Ill.

The report, which was unanimously adopted by the association, is as follows:

NEED FOR BETTER VITAL STATISTICS.

One of the most important and world-wide movements of the present day is the concerted attack on uncleanliness and disease. It is not limited to our own country and people; it is directed against no one disease, but against all the ailments which flesh is heir to. It is all the more irresistible because it comes from so many different angles. The war is being waged with constantly increasing energy. The medical profession has worthy allies in many other branches of science, in philanthropy and among business men and business institutions.

Diseases which a few years ago constituted well-grounded cause for alarm because of their contagious character and high mortality have been brought under subjection and practically eradicated. Medical science has discovered new methods of treating still other diseases so as greatly to reduce their severity and consequent high death rate.

From a layman's as well as from an economic viewpoint, the most interesting and important achievements have been the discoveries for the prevention of disease.

LENDING A HELPING HAND.

It has been the ambition of this association to bear a modest part in this great movement and to lend a helping hand toward the conservation of human life. While the association is not organized primarily for such purposes, yet every thinking person must admit that they have a direct relationship to the business in which the members of the association are engaged; and consequently are proper subjects for the consideration of the association itself.

Every policy holder is directly interested in the actual mortality experienced by this company; and is indirectly interested in the hygienic condition of the communities in which all the policy holders live, and from which future accessions to membership must be obtained.

The national government, many state governments, national, state, county and local organizations, civic and social clubs and societies, special exhibits and special trains are contributing largely and successfully to the work of general and special hygiene and to the prevention and eradication of disease. This association so far has contributed its mite largely through a campaign of publicity and education. Some of the foremost specialists in their particular branches have delivered addresses which have been given very wide publicity. Many of our members little realize how widely these addresses and the press notices of them have been disseminated. Additional impetus has been given also to the work by our individual members and by their officers and directors, both by bulletins, company publications, and personal addresses before local organizations.

WHAT AND HOW TO DO.

One of the serious questions which we have repeatedly asked ourselves has been, "What can we do best and how can we best do it?"

Some of our members have thought that a general campaign of education by the way of public addresses and through the public press was all that we could do. Others have suggested that the association should apply itself more particularly to the betterment of local hygienic conditions; taking some particular place or places as typical of others in which to make the initial move; still others have thought that the association should select some disease, as typhoid fever, and for the time being concentrate all our batteries on it.

When there is so much to be done, and so great a field in which to do it, it is a most difficult task to determine what to attempt first. It matters not how much the national and state governments and independent societies and organizations may do; the actual results, whether applied to the cleaning up of towns and cities, the furnishing of water and milk to the individual consumer free from bacteria and harmful germs, or to the prevention or healing of diseases, must be local in character and must be brought about largely through local sentiment, working through local people.

The important question then is, "How can local public' sentiment be aroused sufficiently to accomplish these results?"

A year ago an appropriation was made by the association to be used in securing additional assistance in connection with the work of its health department. In a general survey of so broad and varied a field no one phase of the work appeared to offer an especially favorable opportunity for making a successful attack with the money available.

LOOKING FOR DEFINITE WORK.

The International Congress of Hygiene and Demography held at Washington, D. C., in September last, seemed to offer a rare opportunity for your committee to view the whole subject from many different angles, and perchance definitely decide along what particular lines the association can best work in the future.

A meeting of the committee was called for the afternoon of the first regular day of the congress. All of the members excepting two were present, one being detained by illness and the other by an unavoidable business engagement. At such meeting the official program of the congress and the published abstracts of the addresses to be given were gone over carefully, page by page, and the members of the committee were assigned to attend different sections of the congress in its morning, afternoon and evening sessions. Those particular lectures on both hygiene and demography were selected which seemed likely to be most helpful. At the close of the next day your committee again met and discussed the work of the day, and new assignments were made for the morrow. In this way we were able to get reports from several sessions and from different sections of the congress.

Medical and hygienic science have, in recent years, made enormous strides both in the control and prevention of many forms of disease; yet such scientific knowledge can not be advantageously made use of without reliable vital statistics. The same principles apply as in private business affairs. If an expert is employed to advise a manufacturer with reference to the condition of his affairs, he will at once ask to see

the books. He can not advise as to the cost of production or manufacture of goods, or as to the actual present financial condition, if no books of account have been kept, and if there are no written records showing past transactions and present conditions. A patient can not be intelligently treated until the physician has an accurate history of the case. A lawyer can not wisely advise a client until all the facts are furnished him. This is so, and even more so in the case of communities. In some localities the highest mortality is experienced from those diseases which are now known to be largely preventable. Familiarity seems to breed, in this case, apathy.

"FAMILIARITY BREEDS CONTEMPT."

It is more difficult to get a community to make war against some disease which, notwithstanding its high mortality, has been of long standing than it is to induce the same people to take up arms against an uncommon disease much less dangerous. One mild case of small-pox in an adjoining county will cause more alarm than a dozen cases of malarial or typhoid fever in the immediate community. * * *

If we can, by official statistics, convince any community that it is an unhealthful place in which to live, and that such fact will be common knowledge, the local inhabitants will apply the remedy. Publicity is the most effective weapon that can be employed; it is a greater agent in any reform than mere mandatory legislation. Dr. W. S. Rankin, of the State Board of Health of North Carolina, forcibly demonstrated in his address before the section on demography at Washington, the great importance of reliable vital statistics in removing unsanitary local conditions. Dr. Rankin has consented to address this meeting, and will furnish you such information at first hand.

It is to be hoped that every member of this association will hear or read Dr. Rankin's address, and also the papers read at Washington by Dr. Dowling, of the State Board of Health of Louisiana, Dr. Plecker, director of the Bureau of Vital Statistics of Virginia, and Dr. Snow of the State Board of Health of California.

The most valuable asset of a man, a family or a community is good health.

PROBLEM IS WITH INDIVIDUAL.

The total population of a nation is the aggregate of many single units. It follows, therefore, that our problem is with the individual. If he is suffering from a disease, and his neighbors are dying, or have died, from the same cause, we must be able to find him before we can cure him, or remove the cause. This can not be done without reliable vital statistics.

The difficulty of securing necessary legislation in some states is well known. The national government and the American Medical Association, among other agencies, are striving to secure adequate and uniform laws in all the states.

In a bulletin recently issued by the American Medical Association this statement appears:

"The present condition of the registration of vital statistics in the United States, considering the country as a whole, is not far from constituting a national disgrace. Unlike practically all other civilized

countries, we have no general and thorough system for recording the chief events of human life, and especially the births of our children and the deaths of our people. * * * Honest data, fairly presented, will remove the imputation of unhealthfulness from many localities now tainted by the apprehension of unsanitary conditions in the minds of possible incomers. Intelligent immigration will not go where the conditions of civilization are so slack that no regard is paid to human life, even so much as to record its beginnings and endings."

Vital statistics kept by cities and counties, without regard to standard forms making comparisons possible, have proven to be unsatisfactory. It is common knowledge that well-managed life insurance companies will not accept risks in sections known to have excessive mortality. Every company properly spends time and money to determine in advance those parts of the country which have an abnormal death rate. Prior investigation is more economical than the payment of death claims on policies imprudently issued. Reliable information should be available from the public records.

INADEQUATE LAWS ON THE SUBJECT.

Some states have no law requiring a registration of vital statistics; in other states the laws are inadequate; and in still others the laws so far have not been effectively enforced. Attention is invited to a map in colors printed on the last page of the cover of this report.

There are sections of the country where the people rebel against a public record being made of the births of their children and the deaths of their people. They say that they and their ancestors never have been compelled to furnish such information to a curious public, and that they will not do it now; yet these same people will not buy a horse or a cow unless the parentage or pedigree is a matter of record. The director of the census in a recent publication says:

"It seems to me that there is almost nothing more important in the entire field of statistics than vital statistics, because of their direct bearing on the health and consequent welfare of the people. It certainly is both strange and shameful that the United States should be so far behind the other leading countries of the world in the registration of deaths, and even more so in the registration of births."

ASSOCIATION CAN HELP.

Your committee believes that it is within the province and within the power of the association materially to assist in the passage and enforcement of proper laws for the securing of vital statistics in the United States, and that such work is both tangible and important.

We believe that the association should continue its custom of inviting well-known public men and experts to give addresses at our annual meetings on the different phases of health conservation and hygiene, and that wide publicity should be given to the same.

We recommend, however, that for the present the association give particular attention and such assistance as lies within its power, to the passage and enforcement of proper and necessary laws for the registration, preservation and compilation of vital statistics, and that a reasonable sum of money be expended for such purposes.

At the concluding session of the sixth annual convention of the Association of Life Insurance Presidents, held on the afternoon of Friday, December 6, 1912, the following resolution was unanimously adopted:

"Resolved, That the report of the Health Committee be commended and its recommendations adopted."

THE HEALTH OF A STATE.

(*Atlanta Constitution.*)

The legislature now in session promises to become notable in Georgia history as creating practical measures for the conservation of health in Georgia, and as giving as much attention to the vital registration of human beings as of cattle, dogs and cats.

Two measures, virtually companion bills, and both indispensable to the end in view, provide for human conservation. They are the vital statistics bill and the public health bill. The vital statistics bill, creating a bureau for the collection of vital statistics under the jurisdiction of the state board of health, passed the senate last week. The public health service bill, creating a state-wide public health service and enlarging and making actual the powers of the state board, will be considered in the house this week.

There is no doubt that the house will pass the public health bill. The advocates of that measure, led by Representative Ellis, will get right back of the vital statistics bill, just as in the senate the advocates of the vital statistics bill will support the public health bill.

In other words, the partisans of both of these measures, recognizing their essential inseparability, are combining to see that both are enacted. The vital statistics bureau will diagnose disease in Georgia, its extent, its location, its nature. It will supply a guide, with which the public health service, once established, will minimize the death rate, whether from typhoid, tuberculosis, meningitis, rabies, malaria, hookworm, or what-not.

In some inscrutable manner the idea has gained circulation in a few quarters that the state health board was opposed to a vital statistics bill, and that it also was opposed to having the functions of such a bureau consolidated with the activities of the board. Such an assertion is, of course, transparently absurd. The state health board has made plain its willingness to take over the collection of vital statistics, as an indispensable prerequisite to an adequate public health service. As a matter of logic and fact, the one and only place for a vital statistics bureau is under supervision of the health board, the purpose of the two being inter-related and inseparable.

Georgia is the only state in the country without a vital statistics law. We still register diseases of animals more scrupulously than those of men, women and children. The fact is a disgrace. Georgia is one of the very few American states without a well organized health machine for combating the death-rate. These twin bills will put Georgia on the health map of the twentieth century. *The Constitution* has no doubt the legislature will enact both.

P. H.



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Jacksonville.

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Public health is purchasable. Within natural limitations any community can determine its own death rate.—New York State Department of Health.

THE DEVELOPMENT OF A SEDIMENTATION TANK.
(IMHOFF DESIGN.)
(ALEXANDER H. TWOMBLY.)

The disposal of sewage presents two problems: First, the conveyance of sewage to a locality for disposal; second, the disposal of the sewage. Water is the conveying medium in sewers and the sewage should have a sufficient velocity so that there should be no settling of solids or sedimentation in the pipes. The sewage then, should reach the disposal plant practically without odors or "fresh."

The separation of the solids from the liquid is the work of a sedimentation tank. After passing through the sedimentation tank, the liquid effluent and the separated solids or sludge must be in condition to be handled without danger or nuisance.

Among the first efforts to separate the liquids and solids was an ordinary tank in which the solids would settle to the bottom, on account of the decrease in velocity, and the liquid would run off at the outflow. Such a tank is only partially successful, because the solid matter, which settles to the bottom, rapidly decomposes and forms gases which cause small particles and islands of the solid matter to rise to the surface of the tank, from which they are carried by the current through the outlet. The gases forming in the tank agitate the tank to such an extent that good settling is impossible.

To overcome this difficulty, scum boards were placed extending a short distance below the surface of the sewage in the tank which held back the floating particles of solid matter until such time as they should free themselves from gas, and again settle to the bottom. The active stirring action caused by the gas, produced a liquefaction of the solids and the effluent from a tank of this description contained liquefied solids in a comparatively clear form.

It was found by experiment, that the clearest liquid could be drawn from these tanks about midway of the depth, and accordingly an end scum board was installed, extending half way down into the liquid under which the clearest liquid was drawn to the outlet of the tank.

Septic action required for liquefaction in these tanks a period of from eight to twelve hours. If the tanks were overloaded, and the sewage failed to be retained for that period, the effluent contained a considerable amount of raw sewage with the liquefied solids.

The Imhoff tank as designed, consists of two compartments. "Typical section," an upper compartment through which the fresh sewage flows slowly so that the solid matter contained in it, which is capable of being settled, falls by gravity to the bottom of the upper compartment, and thence by the outlets in its hopper bottom, into the lower compartment. The fresh sewage passes through the upper compartment in from one hour and a half to three hours, which time is so short that no septic action takes place and the effluent running away from the tank has not fermented.

In the Imhoff tank the solid matter settles to the lower compartment and the gases arising from fermentation pass outside of the upper compartment to the atmosphere, thus causing no interference with the

settling action in the upper compartment. Results prove that instead of settling the usual 50 to 55 per cent of such solid matter as can be settled, that in the Imhoff tank the settling reaches 96 to 98 per cent.

The gases which come away from an Imhoff tank are mainly carbonic acid gas and marsh gas, both of which are odorless. In contrast to this the gases which come off from single shallow tanks are apt to contain large quantities of hydrogen sulphide, which is very offensive.

The liquid effluent flowing from the Imhoff tank, from which the solids have been separated to a great extent, has not been deoxidized, as septic action has not taken place in its passage through the tank. Consequently, fish will live in this effluent, although they would die in the effluent from an ordinary septic tank in which liquefaction has taken place, and from which the effluent runs in a deoxidized condition. The solids which have settled into the decomposing chamber of the Imhoff tank ferment and set up a very active septic action, which the depth of the tank aids. Gases form and carry solid particles to the top where a scum is formed and after being relieved of their gas, the solids again settle to the bottom. This septic action instead of being carried on for twelve hours only, is continued for a period of at least three months, so that the solids form a sludge, in the bottom of the tank, in which the septic action has been carried to a conclusion, the resulting sludge being sterile, non-putrescible and well decomposed. There must be no circulation of sewage in the decomposing chamber. Circulation would produce odors and a nuisance.

The liquid effluent from an Imhoff tank is very dilute, and seldom requires treatment for bacteria other than dilution by running water or in extreme cases, the use of the trickling filter, consisting of about six feet in depth, of broken stone. The trickling filter allows the aerobic bacteria to operate upon the effluent to render it more non-putrescible and stable.

In the installation in Germany along the Emscher river, the German government has not considered it necessary to give any further treatment to the sewage beyond the Imhoff tank itself, and the effluent runs directly from the tank into the river. There are about 90 installations on this river.

* * * * *

"Dr. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.:

"DEAR DOCTOR—I hand you herewith report on the Imhoff tank at Boca Grande. Conditions under which the Imhoff tank was installed were as follows:

"The greatest elevation of Gasparilla Island, Boca Grande, above the level of the gulf is approximately nine feet. This elevation necessitated the use of the minimum grade in all sewers, as the installation was to be operated by gravity.

"The Imhoff tank to care for the population and for the hotel is 18 feet in diameter and about 20 feet deep with a conical bottom extending 6 feet lower. The tank is sunk 18 feet below the level of high tide in the gulf and is about 100 feet from the edge of the gulf. The outlet from the tank is 4 inches higher than ordinary high water in the gulf.

Frequently there are times when high tide floods back to the tank and retards its flow for two hours.

"To flush the sewers use has been made of three artesian wells which are very salt and contain large quantities of sulphurous gases.

"The following facts are well known:

"The greater the hardness of any water, the more difficult becomes settling or sedimentation. The greater content of salt, the less is the bacterial action.

"The conditions under which this Imhoff tank at Boca Grande was to operate, were, therefore, the most difficult that have ever been successfully met. A very hard, sulphurous water; a location in which the flow from the tank was impeded by high tide, and, in the beginning of operation the tank was full of salt water from the gulf.

"Sewage was turned into the tank on August 1, 1913. The tank has operated continuously since that time. The effluent from the tank is delivered into a small bayou and at the outfall there is no indication of any deposit or of any nuisance. The water flowing away from the tank is clear. All the sewage which has been produced has run through the tank and the settled solids have entered into the outer compartment of the tank. Measurements show the decomposed sludge in the bottom to be about 12 inches deep. Part of the sludge was drawn from the bottom of the tank July 20, 1914, and run onto a sand bed alongside of the tank. In appearance the sludge was black with a very faint tar odor, which disappeared in about fifteen minutes, leaving on the sand bed, when dry, a brownish deposit which had only the earthy odor of soil.

"This sludge dried rapidly and at the end of 6 hours could be handled as ordinary dirt. A sample of sludge accompanies this report. No flies gathered upon the sludge, although flies were plentiful in the neighborhood, which is a sure indication that the sludge was in a stable shape.

"To sum up:

"The Imhoff tank at Boca Grande has operated under conditions of a very low head or fall with exceedingly salty, sulphurous water, and has produced a particularly clear effluent free from odor or putrescibility. The sludge from the tank had decomposed into a stable form and can be handled without nuisance and can be shoveled with no more difficulty than ordinary dirt. The tank has been in operation 10 months.

"Very truly yours,

"ALEXANDER H. TWOMBLY."

INTRODUCTION OF PLAGUE BY MEANS OF FREIGHT SHIPMENTS.

In the transmission of bubonic plague the human being is practically a negligible factor. The greatest danger lies in the possibility of spread by means of rodents transported from an infected area into a non-infected area. Freight shipments — especially those packed in straw or other materials furnishing ideal nesting places for rats — provide a means for such transportation of rodents.

Accordingly the officials of the United States Public Health Service in New Orleans are employing eighty inspectors for inspection of overland freight, and the State Board of Health of Florida, while disregarding the passenger traffic from New Orleans into this State, is exerting every effort to carefully guard all freight shipments from that point, and to have such shipments thoroughly examined upon their arrival in Florida.

While such inspection entails a certain amount of inconvenience and, in some instances a slight monetary loss, this should not be considered — in the present emergency financial consideration can not be balanced against the public safety.

This measure is of the utmost importance and the authorities of all municipalities in the State are earnestly urged to carry out the precautions outlined in the following letter:

“STATE BOARD OF HEALTH OF FLORIDA.

“JACKSONVILLE, FLA., AUGUST 7, 1914.

“To the Municipal Authorities of Florida:

“DEAR SIRS—While the plague situation in New Orleans is not alarming, yet, the conditions resulting from a finding of human and rat cases widely distributed over the city, are sufficiently serious to warrant the Executive Officer of the State Board of Health in taking all practicable precautions to safeguard the citizens of Florida against the introduction of the plague infection. Accordingly, under authority conferred by the statutes, the bringing of freight cars into the State from New Orleans, either wholly or partially loaded with freight which has not been inspected and passed and sealed by the United States Public Health Service, now in charge of plague eradication measures in New Orleans, is forbidden.

“The Mayor of each municipality of Florida is hereby requested and required to take cognizance of such cars coming to his city or town and to carefully observe whether the government seals have been tampered with, and when without seals, or with broken seals, to have freight examined for rats, before delivery by the railroad company.

“Very truly yours,

“JOSEPH Y. PORTER,
“State Health Officer.”

FLIES.

There is an old Spanish proverb which vouches for the truth of the assertion that “Into a closed mouth flies never enter.” (It might be remarked parenthetically that it is about the *only* place they do not enter.)

But the unfortunate fact is that the flies don’t *have* to enter — they do their work in a much more dangerous fashion.

They are born in filth, bred in filth, and carry filth with them wherever they go, whether it be to the baby’s bottle, to the market, to the dairy or to your table. They leave a trail of filth, disease, suffering and death behind them.

C. H. D.

TYPHOID.

The following extracts from the quarterly bulletin of the Dayton, Ohio, Institute for Health Promotion are equally applicable to Florida conditions:

"We wish to call attention at this time to the typhoid situation as it affects Dayton. The following table shows the situation at the present time as compared with previous years:

	July.	August.	September.
1910	2 cases	42 cases	51 cases
1911	9 cases	8 cases	17 cases
1912	2 cases	9 cases	7 cases
1913	9 cases	53 cases	35 cases
1914	16 cases	.. cases	.. cases

"This would indicate that we are entering the real typhoid season (August and September) with a considerable handicap over former years. Since it is possible for the people and the medical profession of a community to prevent the spread of typhoid fever, we want to call particular attention to facts regarding the suppression of this disease. AN ABSOLUTE PREVENTIVE OF TYPHOID IS VACCINATION. THIS PROCEDURE IS ABSOLUTELY HARMLESS AND IS A POSITIVE PROTECTION FROM THE DISEASE FOR A PERIOD OF FROM THREE TO FIVE (3 to 5) YEARS."

* * *

"The health department also makes free tests of the blood (Widal) to determine whether a patient is suffering from typhoid. Physicians and others should promptly report all cases suspected of having typhoid fever to this department. By making Widal tests we can assist in the diagnosis of the cases, and by making an epidemiological survey of the situation we can usually trace the source of the trouble and thus prevent the further spread of the disease, not only from this source, but from each particular patient. We want to emphasize the fact that our work in no way interferes with or takes the place of the family physician. We merely offer the resources and assistance of this Department in supplementing the work of the physician in the family. Our interest does not concern medical treatment of the patient; that is the business of the family doctor. Our work concerns the prevention of the disease in other persons.

"FACTS ABOUT TYPHOID FEVER."

"Typhoid is spread by:

"1st—Water. Less than 35 per cent of typhoid in this country is spread by water. Lacking a continued source of infection, water purifies itself of the germs in about seven days. Water-borne epidemics usually occur in Spring, Fall or Winter, rarely in Summer. * * *

"2nd—Ice. Freezing does not kill the typhoid germ, but only helps to preserve it. * * *

"3rd—Milk. Milk is a more frequent carrier of typhoid than any other. While the typhoid germ has a tendency to die in from one to seven days in water, vegetables, and even in the stools of patients, milk

affords it a first-class medium in which to develop. Most summer epidemics are milk-borne. The milk becomes contaminated, directly or indirectly, from a carrier, either at the dairy or in transportation. * * *

"4th—Milk products; such as cream, ice cream, butter, buttermilk and fresh cheese, may contain the typhoid germ.

"5th—Oysters and shell-fish are a frequent source of danger from this disease.

"6th—Fruits and Vegetables. These may become infected from handling or from washing in infected water.

"7th—Flies. This, in a city like Dayton, that is comparatively free from water infection, is one of the most dangerous modes of infection. There are 8,000 privy vaults in the city, many of which are in unsanitary condition. In these and in uncovered manure boxes and garbage cans, flies develop rapidly and come in contact with infected material. They later infect food, etc., and thus directly convey the disease. This is an indirect mode of—

"8th—Contact, which is responsible for many cases. Infection by contact means there is carelessness in handling the excretions from the patient, thus allowing the surroundings to become infected. * * *

"THE PREVENTION OF THE SPREAD OF TYPHOID FEVER.

"The prevention of typhoid can be summed up in the one word, cleanliness; not only ordinary cleanliness, but it includes also the use of disinfectants that will kill the germs of the disease. The germ occurs in the stool, urine, sputum, and vomit of the patient. With proper precautions of cleanliness, etc., it is not necessary that the patient be absolutely isolated. However, it is advisable that none but those who are assisting in the care and attention of the patient be allowed in the room. It is very important to disinfect the stools, urine, sputum, etc., of the patient. This can be done with proper solutions of bichloride of mercury, carbolic acid, or formalin. All dishes and other articles used by the patient should be kept separate and boiled after each use. The clothing and bed linen of the patient should be disinfected promptly after removal, either by boiling or soaking in one of the solutions mentioned above. The water used to bathe the patient should be disinfected before it is allowed to run into the sewer. Milk bottles should not be brought into the house where there is a patient suffering with typhoid fever. Covered receptacles should be provided into which the milkman may pour the milk."

"PRECAUTIONS TO BE TAKEN BY NURSES AND ATTENDANTS—CARRIERS.

"Every time any attention is given the patient the hands of the attendant should be washed in soap and water and immersed in a disinfectant solution. The attendant of the patient should not handle food, etc., that is to be used for other persons. Since the typhoid germ persists in the stools of the convalescents for a period ranging from three weeks to many months after the termination of the disease, it is extremely important that the proper examination of the stools and urine should be made before the patient is released from observation. It is such

cases as these, in which the germs persist for a long period of time, that are called 'carriers,' and it is such persons that form the connecting link between remote epidemics.

"DEPARTMENT OF PUBLIC WELFARE, DAYTON, OHIO."

WAR IS HELL.

No one can deny the truth of General Sherman's statement—war is hell. But the appalling feature of war is not so much in the great number of lives lost as in the fact that these deaths are entirely unnecessary.

In the present European war the number of deaths will probably reach the hundreds of thousands. These numbers will be printed in large, black type upon the first page of all the dailies and the whole world will deplore this needless slaughter.

It is deplorable; but isn't our attitude a little inconsistent? Let us consider for a moment the equally unnecessary deaths that are occurring every day, every hour, right here at home.

In the United States each year there are about 600,000 deaths from preventable disease — about 1,600 each day — More than *one a minute!* These are unnecessary deaths — sacrifices upon the altar of ignorance, indifference or down-right obstinacy and prejudice against preventable measures.

C. H. D.

A SANITARY SERMON.

A. T. CUZNER, M. D.

Human life is worth what it does for society — it is worth just the net value of its productions. And its productive capacity is measured largely by its health.

A sick man is not only useless, so far as production is concerned, but he is a consumer of what has already been produced. He is likewise a menace to society.

Now if the average working man is sick only seven days in one year, his financial loss is — rating his wages at one dollar and fifty cents per day, and his living at fifty cents — a total of fourteen dollars during the year, exclusive of nursing, medicine and medical attendance.

Now it is found that the average number of days of sickness, including old and young, amounts to fourteen days in the year.

Take the number of inhabitants of Jacksonville at a low figure — say fifty thousand; we have a financial loss of one million four hundred thousand dollars.

Now much of this sickness might be prevented, and to this end was the Health Board created.

Hence this sermon; and our text is:

PREVENTION IS BETTER THAN CURE.

This was what was taught me by my *alma mater*, old Columbia.

Much can be done in the direction of prevention of disease by our able state and city boards of health, but much more by individual citizens.

These can keep their homes in a sanitary condition; while our health boards have a general oversight of the city's health and sanitation.

A study of vegetable growth and development reveals the fact that light, heat and moisture are its most potent factors.

It also presents another fact — that the proportion of each of these factors largely determines the character of vegetation.

As a consequence, the earth brings forth those vegetables which are injurious to animal life as well as those which are salutary.

If we examine carefully into the working of the laws governing life development, whether animal or vegetable — likewise death, decay and disintegration, we find obedience to nature's laws is followed by certain favorable results.

There is no favoritism in nature; all are treated alike.

"Believe me, God is not mocked — whatsoever a man sows, so shall he reap."

To those who obey nature's laws of life, she acts the part of loving mother. To those who violate them — whether ignorantly or presumptuously — she appears to act the part of a harsh stepmother.

In sanitary laws, so far as known, we find the same principle holds good.

If we adopt those sanitary measures which science and past experience has taught are most conducive to the health of a community, then such a community becomes healthful.

To illustrate: In the early part of the epidemic of yellow fever in Jacksonville, the writer was appointed to the work of cleaning up those portions of the city called Hansontown and East Jacksonville.

At the close of the epidemic these portions showed a lower death rate than the rest of the city.

During the war with Spain in 1898 two camps of troops were located in Jacksonville; one at North Jacksonville, on low ground; the other on a high bluff on the St. Johns River.

The one at North Jacksonville had large tubs provided to receive the excreta of the soldiers.

The camp on the bank of the St. Johns River was provided with long zinc troughs which were continuously flushed into the river.

At the camp at North Jacksonville I was invited, together with Mayor R. D. Knight, to try some "doughnuts" the boys were cooking.

The cooking was done about fifty feet from where the tubs were located.

We noticed that the flies after partaking of a meal from the tubs came to the doughnuts for dessert, and not content with this, proceeded to bite the cook and his companions.

The death rate at North Jacksonville camp from typhoid was much greater than at the other camp at East Jacksonville.

Now we find in nature that living beings, animals, plants, and living tissues, whether animal or vegetable, are continually undergoing certain processes, viz: growth, development, death, decay, and disintegration.

These processes go on simultaneously.

It is found by observation and experience, that after those substances composing the animal and vegetable tissues have done their work, die and disintegrate, they must be removed and their place supplied by fresh living material.

If retained in such tissues they produce disease — which is a slow form of death.

If after they are removed they are absorbed, or applied to other living tissues they produce disease in such.

If not thus absorbed, such excreta undergo further changes or decomposition, during which process they evolve foul gases besides becoming the breeding places for pathogenic bacteria.

But when placed in that great stomach of nature — *Mother Earth* — they are so digested that they are fitted to again round the circle of life, by becoming parts of living organisms.

In large cities — especially those located on river banks — this method is not resorted to, but a sewerage system is maintained. After all this system is not a perfect success.

Besides defiling the river water to the injury of the fishing interest, the contamination of the river affects the healthful food properties of our fish and oyster supplies.

However it will be as well for individual householders to copy after the greatest sanitarian, *Moses*.

Now we find the Jews had their Gehenna — or *hell fire* — in the valley of Gi Hinnon — there everything corruptible, and likely to infect others, was burned up in this *everlasting fire*.

Let the housewife burn up all waste material likely to infect.

Also let her country sister do the same, and cease to throw her slops out of her windows and doors to infect her water supply.

The Carpenter of Nazareth enforced such teaching by His saying, "If thy right arm offend thee, cut it off and cast it into the Gehenna for it is better than to have it infect the whole body."

HOW TO KEEP WELL.

Health Hints by Dr. W. A. Evans, Professor of Hygiene in Northwestern University and Former Health Commissioner of Chicago.

HIGH BLOOD PRESSURE.

Arterio-sclerosis means hardening of the arteries. When water drops day by day on a stone a hole is worn therein. Arteries overstretched day by day suffer a loss in their elastic fibres; but, instead of showing holes where the worn-out fibres were, there is a compensatory overgrowth of white inelastic fibres. The arterial wall, instead of thinning, thickens, and the blood passage is narrowed. This process requires years.

The blood pressure is the way of measuring its progress. It is the process of growing old. In fact, one way of putting it is to say that the man of 50 has 80-year-old arteries.

In hardening of the arteries the pressure may reach 300. Two hundred is not infrequent. When this gross pressure is analyzed it is

found that the diastolic pressure is low and the pulse pressure is high.

Hardening of the arteries can not be cured. The condition is there. It has been earned. The man has had his fling and we must pay the fiddler. But that does not mean that he should lay down and quit. It is better to throw out a rear guard and fight to protect the retreat than not to fight at all. Why allow a defeat to degenerate into a rout?

A man with arterio-sclerosis should have his pressure taken periodically. He can regulate himself so that he can live a long life and a comfortable one. By temperance in drinking, working and worrying he may avoid the rocks which his arterio-sclerosis has thrown into his path.

By watching his pressure he can foresee and forefend some of those rocks. For instance, if he is having vertigo (dizziness) and an examination shows a considerable rise in his pressure he should guard against apoplexy by starving and purging. Or, finding that his pressure has risen suddenly and sharply, he should have his urine examined for albumin, since Bright's disease is even more threatening than apoplexy.

Also, he should remember that a heart working against a high pressure is under extra strain and, knowing this, he should keep track of the pulse pressure to know the work his heart is doing and how well it is holding up under it.

Nor are these suggestions formidable — a few weeks of trial to adjust one's life to a basis of temperance and then little thought or attention need be given it.

The best opinion is that, under ordinary circumstances, it is not advisable to attempt to lower blood pressure. Faught says:

"It is always a bad rule to promiscuously institute measures to reduce blood pressure. Blood pressure reduction should only be attempted for a good reason, based upon a careful study of the case."

Leave the pressure where it is, but so live that it will not go higher.
—*The State, Columbia, S. C.*

A TALE OF TWO CONTRACTORS.

Two contractors were engaged in a railroad building job. One contractor required every man going to work for him to remove his clothing and take a bath. A clean suit of overalls was then furnished him until his clothing could be disinfected. The employer did this because he didn't want dirty men working for him. He was determined that there should be no lice in his camp. Each laborer was furnished with a good sized tent with a board floor. The tent was supplied with a spring cot and clean bedding. Tents were screened with mosquito netting. The cooking and dining tents were kept in sanitary and invitingly clean condition. Garbage and manure were disposed of so as not to attract flies. Privies were screened to prevent flies carrying infection from typhoid or other intestinal disease carriers. Men who were dirty tramps when they arrived left as clean self-respecting men.

The other contractor did as most contractors do. Whatever his own idea of cleanliness might be, he "wasted no money on frills." The

first contractor had no trouble getting men. The best came to him. There was absolutely no sickness. The only doctor's bill in nine months was for a man who had his arm broken by a horse.

The conditions of the two contracts and the work done were practically identical. The first contractor made a handsome profit. The second actually lost money.

If the moral of this tale were applicable only to railroad builders, there would be no point in printing it here. A railroad construction camp is a small community. The contractor is the ruling power. In the civil community the voters are the supreme authority. As such they can determine what the living and working conditions of their community shall be.

The moral, however, has an even more personal application. A community is an aggregation of individual homes. The housewife is usually the authority on management. She can see to it that her house is screened and clean. The cost of a clean water supply, of proper sewage and garbage disposal can be met by the saving in doctor's bills, extra help made necessary by avoidable sickness, etc., not to mention avoidable funeral expense.—*H. E. Dearholt, M. D., Director Health Instruction Bureau, Extension Division, University of Wisconsin.*

COST OF CURE.

Unquestionably the principle of employing a physician to keep one well is correct.

There has recently been formed in this country a "Life Extension Institute." It was formed primarily by life insurance companies as a business proposition. The institute will employ expert medical examiners throughout the country. Life insurance companies will pay for free examination of their policyholders.

One does not need to be an insurance company to make a profit on the idea. A private individual can arrange with a physician for periodic inspection and for "overhauling" if necessary. Wise automobilists insure against breakdowns. They avoid an ignominious and costly tow home by knowing that the engine and running gears are sound before they start.

Life has commercial value. It has sentimental value. Good health in the home is a luxury. Why not protect it instead of repairing it? A moth eaten garment can seldom be completely restored. It's "good business" to have the little troubles detected and repaired before they become big.—*H. E. Dearholt, M. D., Director Health Instruction Bureau, Extension Division, University of Wisconsin.*

A PREFERENCE.

"I shall leave my reputation to be judged by posterity."

"That's a good idea," replied Senator Sorghum. "The way things are going I'd much rather take my chances with posterity than with an investigating committee."

WOMAN'S PART IN PUBLIC HEALTH WORK AS DEMONSTRATED IN NEW YORK.

Mrs. Elmer Blair, Member of the Public Health Council of New York.

There was a time, and not many years ago, when the public health conscience in my State was undoubtedly drowsy, if not quite asleep; but today, thanks largely to the agitation of our club women, New York is thoroughly awake to the importance of taking a maternal interest in its little ones, of safeguarding its people, and teaching us all how to live and help others to live. The "New Public Health" awakening has been recognized, and I think measurably met, by our new Public Health Law, now about one year old, with its provision for better registration, supervision and nursing; with its Public Health Council of learned men — and one lone woman — whose principal functions are to establish a statewide Sanitary Code, and to define the qualifications and duties of sanitary supervisors, public health nurses and registrars of vital statistics. Even now, with its administration only partially organized, this new law is proving to be a torch lighting the way to great heights, a magnet attracting enthusiastic workers — and among them, my friends, women without number.

There are many of these women who stand out in a signal way, who have won fame and preferment, and whose names are synonymous with the Infant Welfare Stations, the Little Mothers' Leagues, the Committee for the Prevention of Blindness, etc. But it is not upon the work of individuals that I am going to dwell. It is the women in our clubs — those women to whom, because of their devotion to high ideals, and because of their organization, our officials are turning when they feel the need of greater public health education; whose persistent agitation has shown the necessity for more perfect control of methods of handling milk, of inspecting meat, of regulating slaughter-houses, of protecting food from flies and dirt. These women in the aggregate are now recognized as among the most powerful factors in public health work in New York.

I am egotistical enough to think you know about our recent law providing for medical inspection in our public schools. We are very proud of it. Our women had a large part in bringing it about, and are now cooperating with the school authorities in enforcing it. * * *

But I want to bring to your special notice one more activity of our women which is of the utmost importance. It is estimated that in common with the rest of the country, at least forty per cent of our babies are brought into the world by midwives. While the practice of physicians and nurses is very strictly controlled by law, that of the mid-wife (except in a few isolated localities) has been allowed to continue without supervision. In New York city, by virtue of advanced ideas and local legislation, midwives are now educated at a training school in connection with Bellevue Hospital and permitted to practice only upon graduation therefrom or from a similar institution. But in the remainder of the State, excepting in Buffalo and Rochester, until the present Public Health Law took effect, any ignorant and unfit woman could ply her trade without restriction.

The appalling statistics on infant blindness — to mention but one of the dire effects of this laxity — speak with their own mournful eloquence. I have been unable to learn that New York is any exception in this respect. Do you know the actual situation in your own State? Have you any effective control over these women in whose hands you leave the tremendous responsibility of the first chance to make or mar human lives? Under the guidance of Commissioner Biggs, the Public Health Council has virtually completed a general scheme for regulating this work through licensure and supervision of midwives, to be incorporated in our Sanitary Code — and the machinery of this law will soon be in operation. Under it not only will women constitute, as practitioners, an important arm of the public health service, but they are confidently relied upon to act as the watchdogs of its enforcement. They will be appealed to, through their clubs in every part of the State, to cooperate with the Department of Health; and we know from our past experience that they will respond so as to give fresh proof of their unequalled power to mold public opinion and place it behind any movement for good.

I am violating no confidence when I say to you that the Health Department of the State of New York counts upon, and endeavors to utilize to the full, the spirit and the organization of our clubwomen. We have clearly demonstrated that we have a big and growing part in our public health work, and we are trying to meet our responsibilities and our opportunities squarely. Our slogan is: "Study your local conditions; know your laws; work for their enforcement." — *Health News. Monthly Bulletin, New York State Department of Health.*

"How would you classify telephone girl?" asked the old fogey. "Is hers a business or profession?"

"Neither," replied the Boob. "It is a calling." — *Washington Herald.*

"Did you get a plain cook as I asked you, my dear?"
"I couldn't have gotten one much plainer, my love."

VACCINATION SAVES BABY.

MOTHER WITH SMALLPOX DOES NOT GIVE HER NURSING BUT
VACCINATED BABY THE DISEASE.

Dr. Charles T. Nesbitt, County Health Officer for New Hanover county, North Carolina, just reports the most striking instance of the protective power of vaccination against smallpox that we have ever heard reported in this State. He relates the following instance:

A man in his county contracted smallpox. The wife and nursing child of this man occupied the same room and even slept in the same bed with the patient. The wife refused to be vaccinated, but permitted the baby to be vaccinated. She contracted smallpox, but her nursing baby, who had been vaccinated, did not contract the loathsome disease, although the mother nursed it while she had the disease. Is any more striking instance of the protective power of vaccination necessary?

Another interesting instance reported by Dr. Nesbitt is that of a negro boarding house in which seventeen negroes were exposed to smallpox. They were all vaccinated. Sixteen out of the seventeen "took." The seventeenth one did not take but promptly contracted smallpox before he sought successful revaccination.

So far as smallpox is concerned, the only thing to do is to be vaccinated. You are safe then. Otherwise you are always in danger of contracting the disease from some one who has the disease but may not yet be recognized as having it.—*Monthly Bulletin, Ohio State Board of Health.*

"A LITTLE CHILD SHALL LEAD THEM."

Many interesting incidents have occurred in the course of the work at the dispensaries for anti-typhoid vaccination, which have been operated by the State Board of Health during the past month in three localities where the unusual prevalence of the disease demanded this method of control.

At one of the dispensaries a small boy was observed, who seemed to be very intently watching the proceedings. He was very quiet, asked no questions, and to all appearances seemed to be possessed of no more than average intelligence.

In the rush of work the boy was forgotten until he returned, an hour or more later, with his mother and four brothers and sisters. The mother and five children all received the first injection of the vaccine.

The following week only the boy returned. He stated that his mother had decided not to come back. After a short talk with the boy, in which an endeavor was made to impress upon him the importance of the matter, he was given the second of the necessary three injections and left the dispensary.

That afternoon he returned again leading by the hand his three-year-old sister and two-year-old brother, his mother following with the two remaining children. This ten-year-old child had *convinced* his mother of her *duty* to herself and her children. C. H. D.

STATISTICS.

SMALLPOX.

Reported cases of smallpox in Florida, July, by counties (254 vaccine points distributed) :

Bradford	6
Jackson	1
Putnam	1
Total cases smallpox, July	8
Total cases smallpox, January 1 to August 1, 1914.....	505

Dec 4

RABIES.

Report of rabies in Florida, July, by counties:

	No. Persons Treated.
Duval	1
Hillsboro	1
Levy	1
Madison	1
Polk	1
Suwanee	2

Number persons receiving Pasteur treatment, July 7
 Number persons treated January 1 to August 1, 1914. 62

VETERINARY DEPARTMENT.

GLANDERS.

Report of cases, by counties, July:

Duval	1
Seminole	1
Total cases, July	2
Total cases, January 1 to August 1, 1914.	22

CATTLE TICK ERADICATION—CONSTRUCTION OF DIPPING VATS, JULY.

Duval county (at Yukon)	1
Putnam county (at Rodman)	1
Total number vats constructed in July.....	2
Total number vats constructed January 1 to August 1, 1914.	41

HOG CHOLERA SERUM ADMINISTRATION, JULY, 1914, BY COUNTIES.

County.	C.C. Serum Distribution.	Number of Hogs Serum requested for.	Weight of Hogs to be treated.
Alachua	16,460 c.c.	606	42,220 pounds
Bradford	12,800 c.c.	513	37,215 pounds
Citrus	1,200 c.c.	60	1,800 pounds
DeSoto	3,750 c.c.	150	11,250 pounds
Duval	500 c.c.	20	1,000 pounds
Escambia	380 c.c.	26	520 pounds
Gadsden	16,350 c.c.	703	42,428 pounds
Hamilton	15,800 c.c.	605	38,330 pounds
Hernando	3,150 c.c.	125	8,125 pounds
Hillsboro	5,550 c.c.	218	12,650 pounds
Jackson	11,125 c.c.	526	29,270 pounds
LaFayette	500 c.c.	25	875 pounds
Lake	1,900 c.c.	90	5,000 pounds
Leon	750 c.c.	30	2,250 pounds
Levy	3,850 c.c.	167	5,400 pounds
Liberty	700 c.c.	35	1,400 pounds
Madison	3,300 c.c.	165	8,200 pounds
Marion	3,000 c.c.	143	8,005 pounds
Osceola	2,400 c.c.	80	8,000 pounds
Polk	3,750 c.c.	150	11,250 pounds
Santa Rosa	625 c.c.	25	1,870 pounds
Sumter	6,800 c.c.	235	19,450 pounds
Suwanee	27,860 c.c.	1,165	81,825 pounds
Walton	1,050 c.c.	42	2,478 pounds
Washington	1,310 c.c.	52	3,075 pounds
Totals	144,860 c.c.	5,956 hogs.	383,886 pounds

SPECIMEN EXAMINATION, BACTERIOLOGICAL LABORATORIES.

	Jacksonville.	Tampa.	Pensacola.	Total.
Animal parasites	208	117	23	348
Diphtheria	251	43	41	335
Gonorrhoea	58	41	21	120
Malaria	268	231	57	556
Pathological	7	6	1	14
Rabies	9	1	..	10
Tuberculosis	109	91	33	233
Typhoid fever	302	174	65	541
Water (for sewage contamination)...	25	2	6	33
Miscellaneous	43	24	47	114
Rat examinations .....	..	88	1,375	1,463
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Totals	1,280	818	1,669	3,767
Grand total number specimens examined by laboratories of the State Board of Health during July, 1914.....				3,767

DISTRIBUTION OF DISEASES DIAGNOSED IN JULY.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

—MALARIA—

Town.	Diphtheria.	Gonorrhoea.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Apopka .....	..	..	1	..	..	..	1	1	..	3
Arcadia .....	..	..	..	..	..	..	3	..	..	3
Archer .....	..	..	..	..	..	..	..	..	2	2
Baldwin .....	..	..	..	..	..	..	1	..	..	1
Bartow .....	..	..	..	..	..	..	..	1	1	2
Bayard .....	..	..	..	..	..	..	..	..	1	1
Bradenton .....	..	..	..	..	..	..	..	..	2	2
Branford .....	..	..	..	..	..	..	..	..	2	2
Bronson .....	..	..	..	..	..	..	..	..	1	1
Christina .....	..	..	..	..	..	..	1	..	..	1
Cocoa .....	..	..	..	..	..	..	..	1	1	2
Crescent City .....	..	..	..	..	..	..	..	..	1	1
Daytona	9	..	..	..	..	..	..	..	..	9
DeLand .....	..	..	..	..	..	..	..	..	2	2
Delray .....	..	..	..	..	..	..	1	..	..	1
Dunnellon .....	..	..	..	..	..	..	..	..	1	1
Dupont .....	..	..	1	..	..	..	..	..	..	1
Fairfield .....	..	..	..	..	..	..	..	..	1	1
Fernandina .....	..	..	..	..	..	..	1	1	..	2
Fort Green .....	..	..	..	..	..	..	..	..	1	1
Fort Ogden .....	..	..	..	..	..	..	..	1	..	1
Fort Pierce .....	..	..	..	..	..	..	..	1	..	1
Gainesville	3	..	..	..	..	2	3	1	1	9
Greensboro .....	..	..	..	..	..	..	..	1	1	2
Gretna .....	..	..	..	..	..	..	..	..	1	1
Hawthorne	1	..	..	..	..	..	..	..	..	1
Holder .....	..	..	..	..	..	1	..	..	..	1
Jacksonville	7	8	..	..	4	3	49	3	20	94
Jacksonville, release cult.	5	..	..	..	..	..	..	..	..	5
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Carried forward	25	8	1	..	4	6	60	11	38	154

Distribution of Diseases Diagnosed in July—Continued.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

Town.	MALARIA								Typhoid.	Tuberculosis.	Uncinaria.	Total.
	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined						
Brought forward	25	8	1	..	4	6	60	11	38	154		
Jasper	2	..	..	..	..	1	..	..	..	1	4	
Jennings	3	..	3		
Kissimmee	2		
Lake Butler	1	1	1	..	3	6	
Largo	1	..	1	
Leesburg	1	..	..	..	1	
Live Oak	..	1	..	..	1	1	..	..	1	..	6	
Mandarin	1	..	6	
Mayo	2 or 3	2	
Melbourne	1	..	..	..	1	2	
Melrose	1	..	..	..	..	1	
Miami	1	..	..	..	..	..	..	..	1	..	2	
Miami, release cult.	1	..	..	..	..	..	..	..	..	..	1	
Micanopy	1	..	1	
Miccosukee	1	
Mulberry	2	..	..	1	3	
Newberry	1	..	1	..	2	
New Smyrna	1	..	1	2	
Ocala	..	1	..	..	..	..	..	1	..	..	3	
Orlando	..	1	..	..	1	1	4	..	..	2	9	
Palatka	1	..	1	..	..	..	2	
Pine Mount	1	..	1	
Plant City	1	2	1	..	..	..	4	
Pomona	1	1	
Punta Gorda	1	1	
San Antonio	2	2	
Sebastian	1	1	
St. Augustine	2	..	..	2	
St. Petersburg	..	1	..	..	..	..	..	..	..	..	1	
Starke	1	..	1	
Tallahassee	6	1	..	..	..	..	5	..	..	..	12	
Wellborn	2	4	6	
West Palm Beach	1	..	..	1	2	
White Springs	2	2	
Wildwood	1	1	
Williston	2	..	..	5	7	
Winter Haven	1	..	..	1	2	
Without data	1	1	
Total	35	12	3	..	8	14	84	25	80	261		

REPORT OF TAMPA LABORATORY.

Tampa	2	14	..	..	7	4	10	12	13	62
West Tampa	..	..	..	..	..	..	1	1	..	2
Lakeland	1	..	..	..	1	..	1	1	..	4
Clearwater	1	..	..	..	..	..	1	..	..	2
Largo	..	..	..	..	..	..	..	1	..	1
Ft. Myers	..	..	..	..	..	..	..	1	3	4
<i>Carried forward</i>											
<i>Carried forward</i>	2	16	8	4	13	16	16	75	

Distribution of Diseases Diagnosed in July—Continued.

REPORT OF TAMPA LABORATORY.

—MALARIA—

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Brought forward	2	16	..	..	8	4	13	16	16	75
Ft. Dade .....	..	..	..	..	..	..	..	1	..	1
Plant City .....	..	..	..	..	1	..	1	..	1	3
Mulberry .....	..	..	..	..	..	..	2	..	1	3
Wauchula .....	..	..	..	..	..	..	1	..	..	1
Palmetto	1	..	..	..	..	..	1	..	1	3
Reexaminations .....	..	..	..	..	..	..	2	..	..	2
Manatee .....	..	..	..	..	..	..	1	..	..	1
Port Tampa .....	..	..	..	..	..	..	1	..	..	1
Release cultures	3	..	..	..	..	..	..	..	..	3
Zephyrhills .....	..	..	..	..	..	..	..	..	1	1
Brooksville .....	..	..	..	..	..	..	..	..	1	1
Total	6	16	..	..	9	4	22	17	21	95

REPORT OF PENSACOLA LABORATORY.

Pensacola	1	9	..	..	5	1	10	8	4	38
Golding .....	..	..	..	..	..	..	1	..	..	1
Tallahassee	1	..	..	..	..	..	..	..	..	1
DeFuniak Springs	4	..	..	..	..	..	..	1	..	5
Grand Ridge .....	..	..	..	..	..	..	..	..	1	1
Cottondale .....	..	..	..	..	..	..	..	1	..	1
Campbellton .....	..	..	..	..	..	..	1	..	..	1
Sneads .....	..	..	..	..	..	..	..	1	..	1
Milton .....	..	..	..	..	..	..	1	..	..	1
Total	6	9	..	..	5	1	13	11	5	50

Total cases of principal diseases diagnosed by laboratories of the State Board of Health during July:

	Diph- theria.	Gonor- rhœa.	Malaria.	Typhoid.	Tuber- culosis.	Uncin- aria.	Total.
Central Laboratory..	35	12	25	84	25	80	261
Tampa Laboratory..	6	16	13	22	17	21	95
Pensacola Laboratory	6	9	6	13	11	5	50
Total for State.	47	37	44	119	53	106	406

VITAL STATISTICS.

ALL FLORIDA MUNICIPALITIES CAN HAVE VITAL STATISTICS.

The opportunity is now offered to every incorporated city and town in Florida to inaugurate and maintain a complete and permanent record of the births and deaths of its inhabitants and to provide an accurate index of its health conditions.

The interest and appreciation shown by the Florida cities of 2,000 population and over to whom this offer was made last year, as shown by their almost universal passage of ordinances to register births and

deaths and their sending of records to this office for filing and tabulation, warrants the extension of the office to the other municipalities of the State.

This is in fulfilment of the program outlined in the August, 1913, issue of *HEALTH NOTES*, when it was said, after stating the conditions of the offer, "All municipalities of Florida having a population of 2,000 or above, shall be qualified to immediately supply vital statistics to the State Board of Health, and after going into effect, to be admitted to the registration area of the United States; all municipalities of Florida of 1,000 to 2,000 inhabitants shall be next included in this area, and finally the entire State."

The offer is now placed before *all* incorporated places, not alone those of from 1,000 to 2,000 population, upon the conditions that—

First—They pass ordinances requiring a burial or removal permit in case of every death, and the early and prompt reporting of every birth, within their limits.

Second—That reports be made upon the Standard certificates approved and supplied, and in accordance with the forms prescribed, by the State Board of Health, and that these certificates be sent monthly to the Executive Office of said Board.

Third—That local Registrars, to be approved by this Board, be provided to receive these reports, issue permits, make copies of certificates for local reference, transmit originals to this office, and see that the ordinances are enforced.

Fourth—That Registrars be under such control of the municipalities they are serving that any dereliction of their duties can be controlled and that their work may be properly supervised.

Finally—That the practice under this plan be under the supervision of the State Health Officer as Registrar of Vital Statistics, who shall have supervisory power over local Registrars and who shall make all needed regulations to carry it into effect.

To assist each municipality to inaugurate this plan the State Board of Health will pay local Registrars who fulfill their duties 25 cents for each certificate of birth and death properly filled out and promptly transmitted to this office, provided reports of deaths are 90 per cent accurate.

A Model Ordinance, covering the points above outlined, has been prepared and will be furnished each municipality in the State, and each will when ready be supplied with all necessary blanks, instructions and literature explaining the needs and uses of Vital Statistics.

It is greatly desired and hoped that the response to this offer will be prompt and general, and that in the near future every Florida municipality will be collecting and transmitting to this office complete and accurate reports of births and deaths, which can be safely preserved and properly tabulated and published as authoritative statistics of Florida's healthfulness.

IMPROVEMENT IN THE CENSUS REPORTS.

In the Bureau of the Census at Washington, those States and Cities in which the registration of deaths is approximately complete, are included in the records as belonging to "the registration area." In 1900 40.5 per cent of the entire population were embraced in the registration area, which, in 1912, was increased to 63.2 per cent. To the credit of Dr. Cressy L. Wilbur, Chief Statistician in the Department of Vital Statistics of the United States Census Bureau, be it said that interest in the important matter of vital statistics is increasing at a gratifying rate, and is especially widespread in the South. Virginia has just been admitted to the "registration area," Maryland was admitted in 1906 and Kentucky in 1911, and Mississippi, Arkansas, North Carolina and Tennessee are seeking to earn admission. Georgia and South Carolina are considering the passage of the "model law," and the other Southern States will, ere many years, take the few steps necessary to enable the bureau to place them on record without the necessity of inaugurating a different style of bookkeeping for each State, as must be the case unless all adopted one uniform system.

A new and sensible feature in the statistics released by the bureau at frequent intervals for publication, is the placing of a star, or asterisk, opposite the names of cities with large proportions of colored populations. The death rate in such cities is largely increased by that class of residents, and the mark suggests the propriety of making allowances for that condition. In running the eye down the columns of death rates for cities of 100,000 population and over, whenever the figures indicate a very heavy death rate a glance at the name of the city invariably reveals the significant star.

One cheering item in the leaflet from which the above information is gleaned (released December 31, 1913) states that in the last decade the typhoid fever rate *has been cut in half*, "though it is still higher than in some European countries."—*Southern Medical Journal, Editorial, March, 1914.*

VITAL STATISTICS IN GEORGIA.

The legislature of Georgia has just passed in its full form the Model Law for registration of births and deaths, the law advocated by the United States Bureau of the Census and other Federal bureaus and departments as well as by many national organizations and societies, and which has already been adopted in many states.

This action puts Georgia in the forefront of the Southeastern States so far as advanced legislation on the subject is concerned, as she is the first of that group to put the full law on the statute book, thus avoiding the need of rules and regulations — sometimes difficult of enforcement — to put it into practice.

In the last issue of *HEALTH NOTES* was printed an editorial of the *Atlanta Constitution* strongly approving this Model Law for Georgia. Below is reprinted an article from the *Savannah (Ga.) Morning News* of August 11 last. Every point in it as to vital statistics in that State applies with equal force to Florida:

"News that the vital statistics bill had passed the House was received in Savannah last night by Dr. Ralston Lattimore in a telegram from Representative Shuptrine. It had already passed the Senate.

"The news is highly gratifying to the members of the medical profession here, particularly to Dr. Lattimore, who labored ceaselessly to have the bill passed, and who did more than anybody else to bring the legislature to realize the necessity of such a measure.

"The bill has now passed both houses and will become a law as soon as the Governor signs it. Because it was not passed sooner it was feared that perhaps it might not pass at the present session.

"In discussing the measure last night Dr. Lattimore, who is chairman of the committee on public policy and legislation for the medical profession of Georgia, said:

"'Vital statistics is the backbone of every system of health laws.'

"'We are very ignorant concerning health conditions in Georgia. All we know about it is based on hearsay evidence. Our health officers do not know. We do not know how many deaths occurred in Georgia last year or any other year. We do not know in what part of the state typhoid fever occurred last year, nor the number of deaths from the disease. The same is true of every other disease. We have no exact knowledge about these things. We don't know whether our death rate is higher or lower than it is in adjoining states. We don't know what diseases are the most prevalent here nor the most fatal. We can only guess and estimate.'

"'Not only the health officer, but the lawyer, the physician, the teacher, the real estate dealer, the investor—in fact, every intelligent person has use for the knowledge that vital statistics alone can give. The material development of our great commonwealth has been seriously retarded by the absence of dependable mortality statistics.'

"'Capitalists will not invest money in a community that has an unenviable reputation as to healthfulness. Homeseekers do not care to move into such a community. The people of the east and even the Europeans are prejudiced against our state and section because of the imputation of unhealthfulness.'

"'A good reputation for any community as to health can only be established by a thorough registration of deaths, and the causes of the same.'

"'No great industrial company would locate its factory in a town or community where no definite information regarding the healthfulness of the place could be obtained. The man with money is not satisfied with guess work. He demands facts. He wants proof. Despite our other advantages, our farming and manufacturing interests are being hampered in Georgia because we can give to outsiders no reliable account of our healthfulness. We have no vital statistics.'

"'Effective work for the prevention of disease can not be successfully prosecuted unless the prevalence of the various diseases can be promptly determined. Epidemic diseases can only be stopped from spreading by the application of proper preventive measures at the time and place of the outbreak.'

COULD PREVENT DISEASE.

"Death certificates properly kept, not only show the time and place of pestilential outbreaks, but they also show the ages and classes of persons affected, the relations of the different conditions, sex, occupation, poverty and other conditions.

"Much over half the sickness in the United States is preventable sickness and over half the deaths avoidable. The medical profession possesses the knowledge which makes the prevention possible. Is it not incredible that a matter of such importance as the saving of half a million lives annually has to be a matter of estimation or conjecture?

"If it is found that Georgia is, in fact, unhealthful, we want to know it, so that we may remove the trouble. If the imputation of unhealthfulness is true, then it is doubly important that we be informed of the facts, for no people can be happy and prosperous until they are a well people."

DELAYED AND INCOMPLETE VITAL STATISTICS REPORTS.

Failure by local Registrars to transmit reports of births and deaths in their cities promptly on the 10th day of each month is causing this office much unnecessary trouble and correspondence and is delaying the publication of tabulated statistics. At this time several cities are delinquent in reports of months in the Second Quarter, which prevents the half year tabulation being issued; a number of cities have also as yet failed to send in their reports for July.

There is no good reason for this, especially on the part of those cities which have adopted the Model Ordinance. Its provisions should secure death certificates at the latest in 72 hours, and in all cases of burial or removal usually much earlier; birth certificates by it are to be filed within 3 days. These times for filing leave 7 days until the day of transmission to collect all reports of the preceding month — those properly transmissible — which should be ample.

Reports from a number of cities show so few deaths since the beginning of this year that this office is forced to question the completeness of their Mortality records. Where the requirement of the burial permit is in force there is no excuse for failure to obtain the requisite 90 per cent of death certificates.

Pending the passage of needed legislation and becoming familiar with the practice under its provisions, this office has been and intends to be lenient in construing the terms of its agreement for payment of Registrars. However, it now seems necessary to be more strict, and attention is called to the rulings as to payments which appear on the last page of this issue.

Municipal authorities and citizens of each city should see that Registrars do their full duty and neglect nothing which could hamper health work or discredit the healthfulness of any community.

RAMPAGEOUS.

"What's your wife reading now?"
"The riot act, mostly."

VITAL STATISTICS. PAYMENT FOR REPORTS.

REGISTRARS Please Take Notice.

Registrars of Vital Statistics of the Registration Cities of Florida are reminded that payment for their reports transmitted to the State Registrar of Vital Statistics is conditional upon said reports being 90 per cent accurate, and also upon reports being made and certificates being transmitted promptly.

HEREAFTER REGISTRARS WILL BE REQUIRED TO CERTIFY AS TO WHETHER MORTALITY REPORTS ARE 90 PER CENT ACCURATE, AND EACH CITY WILL BE SUBJECT TO CHECK AND INSPECTION, AND IF REPORTS ARE FOUND NOT WITHIN 10 PER CENT OF ACCURACY, IN THE DISCRETION OF THE STATE REGISTRAR PAYMENT WILL BE WITHHELD.

Monthly reports should be transmitted on the 10th day of each month and should only contain reports of births and deaths which occurred during the prior month, and should not contain any reports of cases from the 1st to the 10th of the month of transmission. Reports of cases occurring during the said 10 days should be held and transmitted with the others of that month on the 10th day of the succeeding month.

REPORTS SHOULD IN ALL CASES BE TRANSMITTED PROMPTLY ON THE 10TH DAY OF EACH MONTH. PAYMENT FOR DELAYED REPORTS WILL, IN THE DISCRETION OF THE STATE REGISTRAR, BE WITHHELD.

JOSEPH Y. PORTER,
State Health Officer and Registrar of Vital Statistics.

Bureau of Public Health Division of
Health Reports and Statistics.

P.H.R.

FLORIDA



Bureau of Public
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Florida Avenue and Constant Street, Tampa.
City Hall, Pensacola.

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Not only is public health purchasable, but it is the best bargain ever offered.—Chicago Department of Health.

ALLIES AND PROMOTERS.

Every good citizen, whether native or imported, whether of Florida or of whatever state, presumably has the highest welfare of his community at heart. Presumably, also, he will be an active supporter of what makes for its upbuilding and, presumably again, he will not knowingly or willingly become a destroyer or a "knocker."

These several presumptions are not violent stretches of the normal imagination nor are they unreasonable; indeed, they are so extremely probable as to be the basis for sound argument.

Florida's Board of Health has been working twenty-five years and more, for the good of the state. What it has accomplished is a matter of voluminous record, which has been often reported and repeated to the people of the state. The net results of this quarter century of consistently scientific work have been to raise the great peninsula from the popular suspicion of being one of the most unhealthy sections of the country, to the positive knowledge that it is one of the most healthful, with a death rate probably as low as the lowest.

This work has been wrought against natural difficulties and obstacles and against the constantly diminishing opposition of ignorance, for as positive benefits have become plainly apparent, the per capita annual expenditure of ten cents for each resident of the state, white and black, old and young, has been seen to be at least worth while. As a wider knowledge of the plans and accomplishments of the board has been disseminated, the approval of the taxpayers has been given more and more freely, for criticism has come through ignorance.

Every honest man is working in dead earnest along some particular line for his own advancement and his own betterment, and this personal advance adds to that of the state. Each is an authority in his own line and he rightly claims recognition as such. He accords such recognition to others who are as sincere and earnest as himself. No one can be a specialist, an expert, in all departments of human endeavor—the sum total of all practical working knowledge is too vast, too exhaustive.

It is on this ground that the State Board of Health claims for itself the support, moral and physical, of every citizen of Florida. It is doing and has done a great work, and its usefulness was never greater, its activity never more vigorous than today. The importance of this work in the upbuilding of the state is being recognized, and naturally this recognition comes from those physicians and laymen who are best acquainted with this work.

Its critics—and no successful man or organization is ever free from them—are of two classes: Those who are ignorant, and those who assume to themselves the wisdom to supervise human endeavor in every direction.

None of us has the right or the wisdom to criticize the acts of another until he knows the reason, the motive for those acts. None of us, being human, is above the possibility of error, but each of us has the right to be recognized as honest in his error. And each of us has a right

to the confidence of the community, with the conclusion that increasing years of experience make such errors fewer and less important.

Florida's Health Board is profoundly grateful for the confidence that has been given it in the past. It asks that this be continued as the larger and more important problems of the future shall tax its wisdom.—*Press service, State Board of Health.*

"BE A HOG".

Some few years ago, the State Health Officer of Indiana graphically told in the bulletin of his State Board of Health, of a pitiful case of pulmonary consumption, where a young mother with the disease, poor and helpless, with several children to look after, had applied for relief from the state, but was told that there was no provision of law by which the funds of the state could be given for such a purpose. Dr. Hurty ironically called attention to this fact, that although the state could not give of its means to either save or make more comfortable this little mother's existence, yet bountiful provision was made for a free distribution of hog cholera serum for the sick swine of the state. The citation of this case, which was a real instance, and which was a caustic criticism upon the inhumanity of man, as shown by the Legislators generally, when dealing with protective measures to health, by niggardly appropriations for the benefit of the human but lavishly providing for the commercial protection of the farmer, caused much comment and approving commendation from sanitarians everywhere.

This article from Dr. Hurty's pen is published in this issue of the HEALTH NOTES besides another equally strong and equally as true as regards facts, which is clipped from the *Tampa Tribune*.

The State of Florida authorizes the free distribution of hog cholera serum to the farmers of the state, and this year the cost of this free distribution will tally somewhere near twenty-five or thirty thousand dollars. Several years ago the State Health Officer sought permission from a former Comptroller to expend some of the funds of the state in aiding indigent consumptives in a local tuberculosis camp nearby to Jacksonville. The permission was denied, because as the Comptroller said, there was no law authorizing such expenditure except in an institution controlled solely by the State Board of Health. This Comptroller was a most humane man and it is known that if he could have approved of the suggestion of the State Health Officer he would have cheerfully done so, for his heart was with this class of unfortunate sufferers.

Florida and Illinois are the only two states in the Union where hog cholera serum is given away without cost, and even in the latter state, Illinois, only about one request in every twenty-five is filled. This is said to create dissatisfaction on the charge of discrimination. It has been pointed out in the publications of the State Board of Health that it is unfair to the taxpayers in general, that a class of citizens commercially engaged should profit at the expense of the body politic, for it is only those engaged in swine raising that derive the advantage of a free distribution of a very expensive article. In equity it can be asked, why should not the citrus growers and those otherwise engaged in

horticulture be given, free of expense to them, those protective agents or methods which science has shown will destroy insects and increase the volume of growth and fruit?

It should also be borne in mind that, in providing hog cholera serum free of cost to the farmers of the State, no material or protective benefit is extended to the health of the citizens of the commonwealth, for hog cholera is not communicable to man. Thirty thousand dollars a year expended in the interest of the indigent tuberculosis citizens of the state would make many a poor sufferer of this disease live comfortably and put him or her on the road, perhaps, to recovery.

Under present conditions and the temper of the legislators, both national and state, it is evidently easier to obtain substantial means to cure hogs and cattle than it is to protect the men, women and infants of the country from the ravages of preventable diseases. Dr. Hurty's advice, "To Be a Hog," is not an unwise suggestion if you want the paternal care of the nation and of the state.

(Dr. Hurty's Article.)

THE YOUNG MOTHER AND THE FAT HOG. NOT A FABLE.

One time a little mother, who was only twenty-five years old, began to feel tired all the time. Her appetite had failed her for weeks before the tired feeling came. Her three little girls, once a joy in her life, now became a burden to her. It was—"Mamma, Mamma," all day long. She had never noticed these appeals until the tired feeling came. The little mother also had red spots on her cheeks and a slight dry cough. One day, when dragging herself around, forcing her weary body to work, she felt a sharp but slight pain in her breast, her head grew dizzy, and suddenly her mouth filled with blood. The hemorrhage was not severe but it left her very weak. The doctor she had consulted for her cough and tired feeling, had said: "You are all run down, you need a tonic." For a fee he prescribed bitters made of alcohol, water and gentian. This gave her false strength for a while for it checked out her little reserve. When the hemorrhage occurred she and all her neighbors knew she had consumption and the doctor should have known it and told her months before.

Now she wrote to the State Board of Health and said: "I am told that consumption in its early stages can be cured by outdoor life, continued rest and plenty of plain, good food. I do not want to die. I want to live and raise my children to make them good citizens. Where can I go to get well?" The reply was: "The great Christian State of Indiana has not yet risen to the mighty economy of saving the lives of little mothers from consumption. At present, the only place where you can go is a grave. However, the state will care for your children in an orphans asylum after you are dead, and then in a few years a special officer will find a home for them. But save your life—never. 'That is a cranky idea,' for a member of the floor of the Sixty-fifth Assembly said so. Besides, said he: 'It isn't business, the state can't afford it.' So the little mother died of the preventable and curable disease, the

home was broken up and the children were taken to the orphans asylum.

A big fat hog one morning found he had a pain in his belly. He squealed loudly and the farmer came out of his house to see what was the matter. "He's got the hog cholry," said the hired man. So the farmer telegraphed to Secretary Wilson of the United States Agriculture Department (who said the other day he had 3,000 experts in animal and plant diseases), and the reply was: "Cert., I'll send you a man right away." Sure enough the man came. He said he was a D. V. S. and he was, too. He had a government syringe and a bottle of government medicine in his hand bag, and he went for the hog. It got well. It wasn't cranky for the government to do this, and it could afford the expense, for the hog could be turned into ham, sausage, lard and bacon.

Anybody, even a fool, can see it would be cranky for the state to save the life of a little mother, and it could not afford it either.

Moral: Be a hog and be worth saving.

HOGS VS. HUMANS.

A well-known citizen, a few days ago, called upon the local representative of the State Board of Health for the purpose of asking assistance from that agency for an indigent family residing near this city, three members of which are victims of tuberculosis.

The family is without funds, living in the most uncomfortable quarters and subsisting on aid extended, from time to time, by kind-hearted neighbors. Several of the family have died from the disease and the unsanitary surroundings are such that the survivors soon contracted the disease.

The citizen desired to have the State Board of Health provide better quarters for the family and destroy the old shack in which they at present reside.

Just ahead of this citizen, seeking aid for human beings, was a farmer who has hogs suffering from cholera. The farmer applied for the treatment that is accorded in such cases and was promptly supplied.

But the State Board of Health is not authorized by law to provide assistance or relief for human beings. It is well-equipped for the treatment of hogs but the great State of Florida, through its legislature, has not taken into consideration the relief of men, women or children who become the victims of disease.

The State Board and its officers are alike unable to meet such calls as were made by this citizen, because the legislature has failed to enact the necessary laws or make available the necessary funds.

The incident suggests a duty to the next legislature. The State Board of Health should be empowered to answer appeals of this nature. It should not be said that in Florida a hog is given greater consideration under the law than a human being.—*Tampa Tribune*.

"Make your neighbor's front yard jealous of your back yard."—*North Carolina Health Bulletin*.

A REASONABLE DEMAND.

"Since the last issue of the *Bulletin*, two cases of smallpox were found among the railway postal clerks running from Chicago to Omaha on the C. & N. W. R. R. Neither of the clerks had ever been successfully vaccinated.

"One, whose home is in Dixon, Ill., was found at the depot in Chicago ready to go out on the mail car to sort and distribute mail and smallpox infection. He was in the scaling period of the disease, eighteenth day of the eruption.

"The other case was found Sunday. He worked on the same train with the first victim and contracted the disease from him.

"These two men were engaged in a public service and are paid by the public to serve them, not with smallpox, but mail. It is not asking too much of persons in the public service to protect themselves and the public from smallpox by vaccination. Had these two men been refused employment in the government service until vaccinated, as required by the Chicago Department of Health, the expense and suffering incidental to smallpox would have been avoided. Why not vaccinate and end the susceptibility to smallpox?

"One of these men is less blamable than appears. He tried vaccination five times with negative results, and a doctor told him he was insusceptible to smallpox, instead of advising him to persist until he secured a 'take.'

"A few years ago a doctor gave the same mistaken advice to a cashier of a bank in a Chicago suburban city after four unsuccessful trials at vaccination. In consequence of this false advice, the cashier died a few months later of hemorrhagic smallpox at the early age of 37 years."—*Bulletin Chicago School of Sanitary Instruction*.

Without detracting in the slightest degree from the truth and force of the above, it might be mentioned that here again enters the question of *individual responsibility*. If each individual who was exposed to infection through the negligence of these two men had previously been successfully vaccinated, there would have been no danger from these two postal clerks, vaccinated or unvaccinated.

NOT ONLY IN MIAMI.

The following from the *Miami Metropolis* is applicable to us all:

WE NEED TO BE WISER.

"The best medicine. Two miles of oxygen three times a day. This is not only the best, but cheap and pleasant to take. It suits all ages and constitutions. It is patented by Infinite Wisdom, sealed with a signet divine. It cures cold feet, hot heads, pale faces, feeble lungs, and bad tempers.

"If two or three take it together it has a still more striking effect. It has often been known to reconcile enemies, settle matrimonial quarrels and bring reluctant persons to a state of double blessedness.

"This medicine never fails. Spurious compounds are found in large towns, but get into the country lanes, among green fields, or on the mountain top, and you have it in perfection as prepared in the great

laboratory of nature. Before taking this medicine Blank should be consulted, with the understanding that corns, bunions, or bad nails prevent its proper effects."

This text, found originally on a placard in a shoe shop in London fifty years ago, has been copied into Hinsdale's "Atmospheric Air in Relation to Tuberculosis," one of the essays to which a prize was given by the Smithsonian Institution. And we know—everybody knows—that the London shoemaker was right, but how few of us are wise enough to take this medicine!

Here in Miami there is wonderful tonic properties in the fresh air; very early in the morning and late in the afternoon a walk of several miles would be worth everything in the way of restorative "medicine," and yet we neglect to practice the homely precept incorporated in the shoemaker's sign.

We even do worse than neglect it. We stay in badly ventilated rooms. We breathe air laden with the poisons from others' breathing. We know that much of our low vitality comes from a lack of sufficient oxygen and yet we continue to spend our indoor lives in an atmosphere baneful in the poisons it carries, and even out doors we breathe with shallow inhalations that give us just as little as possible of what we may take so freely, vitality-giving clean air! After all, we are lacking somewhat in wisdom, we Miami folks.—*The Miami Metropolis (Editorial).*

CONVINCED.

This is a story of a Foolish Woman—of a mother who refused to protect herself and her children from disease.

This Foolish Woman, with her son and three daughters, lived within an hour's ride of the office of the State Board of Health. Yet only one member of the family—a fifteen-year-old girl—had been vaccinated, and she against her mother's wishes. This mother preferred that she and her children should "take their chances with smallpox." A foolish attitude certainly, but not an uncommon one—there are thousands like this woman.

In the course of time, in accordance with the laws of Chance or the workings of Providence—whatever you may choose to call it—the son contracted smallpox. The family was visited and immediate vaccination was offered to and urged upon the mother and the two older daughters. This offer was refused. Vaccination was "all right for those who believed in it," said the Foolish Woman, but SHE didn't "believe it prevented smallpox" and besides SHE "wasn't afraid of smallpox." (Isn't it strange that persons will back their own unfounded opinions against the years and centuries of thought and study by medical scientists?)

After ten days or two weeks—as might be expected—the mother developed the disease, and then the two unvaccinated daughters. Every UNVACCINATED member of the family had smallpox! The girl who had been vaccinated did not—she nursed the others throughout their illness.

There is nothing particularly surprising or unusual in these facts—hundreds of similar cases have occurred. But now comes the sequel:

When the State Board of Health recently established dispensaries for antityphoid vaccination this woman, and her whole family, were among the first to apply for vaccination. She greeted us with the remark: "There's no fool like an old one, but THIS old fool has learned her lesson."

She has indeed "learned her lesson." Not only did she bring her entire family to the dispensary, but she influenced many of her neighbors to take advantage of the opportunity which was offered them. She is no longer a "Foolish Woman"; she is an apostle of health, doing her humble part in teaching to others the knowledge which she gained through bitter experience.

C. H. D.

RELATION OF THE SCHOOL TO EPIDEMICS.

Just at this time, upon the eve of the opening of the public schools throughout the State, the following excellent article from the *American Journal of Public Health* is of more than usual interest:

SHALL WE CLOSE THE SCHOOL DURING EPIDEMICS?

By FRANCIS GEORGE CURTIS, M. D.,
Newton, Mass.

(Read before the Massachusetts Association of Boards of Health.)

Among the traditional methods of dealing with an outbreak of communicable disease which have survived from the past, closing the schools when an epidemic appears seems to have lasted longest.

One can not read in the daily papers the account of a so-called epidemic without seeing it stated that the board of health is taking vigorous steps to control the outbreak by closing the schools. Indeed, the public is so convinced that closing the schools is the necessary step to be taken in controlling an outbreak, that, if this is done, it rests assured that vigorous methods of control are in force and is satisfied, even if nothing more active is undertaken.

If, however, the health officer declines to close the schools he is blamed no matter how active he may be in checking the outbreak in other ways, and tremendous pressure is put upon him to compel him to close them. This pressure comes chiefly from the parents, but often, I am sorry to say, from the practicing physicians, and a man must have a very rigid backbone to withstand it.

The statute provides that when a disease dangerous to the public occurs the board of health shall use all possible care to prevent the spreading of infection; that is, the duty of the board is directed towards preserving the health of the public rather than towards the individual.

One factor necessary in checking an outbreak quickly is a knowledge of the cases at the earliest possible moment, in order to eliminate possible foci of infection by removing and isolating infected or suspicious cases, and the whole matter resolves itself into the answer to the question whether the board can best do this when the schools are open and the children under supervision or when the schools are closed and the children scattered?

It seems to be almost a truism to say that the best work can be done under the first set of conditions.

Another point which I fear is often overlooked is that, other things being equal, the work of the board should be done with as little disturbance of normal conditions as is compatible with efficiency. In other words, if the outbreak can be checked as quickly and efficiently without closing the schools as by closing them, the former alternative should be adopted.

The arguments in favor of closing the schools seem to be based chiefly upon tradition and public demand and not upon careful study of the manner in which infection is transmitted in and out of the schools.

In the old days before much attention was paid to medical inspection of the school children and when incorrect ideas of the method of transmission of infection were held, the schools seemed to be very active means of spreading infection, and, indeed, at first glance, it may seem as if the schools were responsible for an increase in the incidence of the commoner communicable diseases of childhood. There is undoubtedly a rise in the curve of incidence of any of these diseases shortly after the opening of the schools in the autumn, and the natural inference is that the opening of the schools is the cause of this rise, but a little thought and a more careful study of the curve will show that this is not the fact.

During the vacation the majority of children of school age are not under such careful supervision as they are when the schools are open—many of them are away from home and there is a larger number of missed and unreported cases. As soon as the schools are opened and the medical inspection begins, these cases are discovered by the school physicians and there is a rise in the number of cases reported.

Dr. John D'Ewart, assistant medical officer to the Manchester (England) Education Committee, claims that this rise is caused by the detection of many missed cases just after the schools open, and is really a rise in the number reported, and not a rise in the actual number of cases existing.

He shows that in Manchester during seventeen years, from 1893 to 1909, there was a rise in the number of cases of scarlet fever reported, beginning in September shortly after the schools open, reaching its maximum in the second week in October, and falling rapidly from October to end of the school year, with a slight rise in the second week in January.*

He also shows that, taking the age at which children were attacked, there is a rapid rise in the curve of incidence up to seven years of age, followed by a steady fall from that age onward.

Children do not begin to attend school regularly until six years of age, so that the rapid rise in the curve of incidence shown during no school or irregular school attendance is stopped and converted into a fall after one year of regular school attendance.

If the schools were responsible for an increase in the *incidence* we should expect a great rise after the children enter school, say between

*The Medical Officer, London, Vol. VII, No. 9, p. 97ff.

the fifth and seventh years, whereas the figures do not show this expected rise, the percentages being 13.84 from 1 to 3 years, 28.71 from 3 to 5 years, 31.48 from 5 to 7 years and 24.53 from 7 to 9 years.

Taking the cases reported during the first fourteen years of life, 54.86 per cent occur during the first seven years and 45.13 during the second seven years.

In Newton, where the average age of entering the first grade is 6 years and 3 months, the percentage of attack in scarlet fever during 20 years, from 1893 to 1912, was as follows: 14.04 from 1 to 3 years, 25.56 from 3 to 5 years, 30.89 from 5 to 7 years and 27.80 from 7 to 9 years. For the first seven years of life the percentage of incidence was 52.01 and for the second seven years 47.98.

These figures seem to clear the schools from responsibility for any great increase in the rate of incidence of disease, for while the calculation is based upon scarlet fever alone it is equally true of diphtheria.

In two instances lately where the outbreaks were due to missed cases which were in the schools for some time before discovery, the first cases found were not children who sat near the infecting cases, nor were they in the same grade, but were those who were their playmates and companions out of school.

Thus, in an outbreak of scarlet fever due to a missed case, the first case reported was a child in another grade in the school, but living at the end of the same street with and a playmate of the infecting case; the second case was a child in another school, but living next door to the infecting case; the third, fourth and fifth cases, reported simultaneously, were a brother and sister of the infecting case and a playmate living across the street, none of them in the same grade. All of these cases, together with others, were traced to the infecting case, but of eleven cases due to this one, only two were in the same room at school.

More recently, in an outbreak of diphtheria, the cases were similarly infected, the majority being found among the children in other rooms than the one in which the infecting case sat, but all living near and playing with him out of school.

Of course, no conclusions of any value can be drawn from so few instances; they are given for what they are worth in the hope that further observations by others may confirm or disprove them, but as far as they go they seem to show that infection is not contracted in the school room as frequently as is usually supposed.

If the schools are closed when an outbreak occurs, the children are turned loose from supervision; they mingle freely with one another in the streets, on playgrounds and in each other's houses. They are having an extra vacation and enjoying themselves thoroughly and are unwilling to admit that they feel ill, lest they be kept at home and prevented from having a good time. For this reason they will not say they feel ill until they are possibly well advanced and they may be active sources of infection for some time before it is discovered that they are ill.

In our experience in Newton, it has usually happened that cases among children kept out of school by their parents from fear of infection during an outbreak are much further advanced and much more sick

when found than are cases among children who have continued at school, and also that the outbreak has lasted longer among the former class than among the latter.

Dr. E. C. Levy, health officer of Richmond, Va., believes that during an outbreak of measles in 1910, the schools and Sunday schools were the chief means of spreading infection. In the outbreaks of 1912-13, he tried the effect of closing the rooms in which a case appeared for five days, viz.: from the ninth to the fourteenth day, after the detection of the first case. He thinks that this plan "would undoubtedly have lessened to some extent the spread of the disease," but it was soon apparent that such a course would result in the complete disorganization of the whole public school system.

It was, therefore, abandoned and whenever a case was discovered the teacher was instructed on what day to look for prodromal symptoms in others and that such cases should be immediately separated from the other children and examined by the school physician or nurse. In other words, after a careful trial, the closing of the schools was abandoned as impracticable.

If the schools are kept open and the children continue in the classrooms as usual; they are under strict observation and examined daily by the school physicians, suspicious and infected cases being sent home for observation or treatment.

In this way many children are sent home before they have had an opportunity to infect others, thus reducing the probability of spreading infection. Further than this, the attention of the parents is called to the fact that the child is feeling ill and he is brought under treatment earlier.

It seems, therefore, that keeping the schools open offers the best chance of safety for the scholars both collectively and individually.

Instead of closing the schools and allowing the children to be scattered and removed from supervision when an outbreak appears they should be kept open as usual and the children urged to attend. The school physician and nurse should be detailed to the school where the outbreak has appeared and instructed to examine every child daily, excluding such as appear ill or suspicious. This can be done with very little disturbance of the school work.

A note must be sent to the parent stating that the child seems, or is, ill and must be seen by the family physician.

Suspicious cases must be ordered to remain at home until further notice, and, if necessary, must be visited later in order to find out why they have been kept at home. If they are ill, they must be isolated, and, if well, urged to return to school.

Such a method of dealing with an outbreak may seem to entail a large amount of work and require a specialization, which the ordinary board of health can not carry out, and it does entail more work than closing the schools and waiting for the outbreak to stop itself, but in reality it is not difficult.

In a large city the necessary force is at hand and ready to start work; in smaller cities the number of cases to be handled is small and

will probably be confined to one school, and the school physician can be detailed to the affected school during the outbreak, leaving the other schools in his district to be covered by one of his colleagues.

Even if extra help should be required, a condition which will rarely occur, the extra expense incurred will be more than offset by the shortening of the duration of the outbreak and the lack of disturbance to the schools.

When the schools are closed certain expenses such as salaries, etc., continue without any return and there is also an added economic loss from the lessening of the time for instruction, so that the children in the affected school or schools are behind others in the same grade in the unaffected schools.

One practical difficulty which tends to lessen the value of keeping the schools open will be found in the fact that many children will be kept at home by their parents through ignorance of the facts or fear of infection.

This can be met by a frank explanation of the reasons governing the action of the board in keeping the schools open. In the writer's experience it has often happened that after a frank explanation of this sort to a disturbed parent the result has been that the enquirer has sent his children back to school the next day, being convinced that they were fully as safe there as when they were kept out.

In many Massachusetts cities the medical inspection of schools is under the control of the school committee and at first sight this would seem to complicate matters, but there is no real reason why it should.

As a rule the school committee is not at all anxious to have routine work of a school upset by closing, and is, therefore, very willing to keep it open and have the work continue. This being so it will require very little persuasion to induce the committee to keep the affected school open.

While somewhat beyond the scope of my subject I wish to say that in my opinion the medical inspection of schools is a very necessary part of the work of a board of health and should be under its control.

In conclusion, while it seems evident that keeping the schools open during an outbreak offers the best method of checking it quickly, it must not be thought that this alone is sufficient. There is plenty of other work to be done in looking for the cause of the outbreak, but the work in the schools counts for the most and is the most important.

BREAKERS OF THE LAW.

Since the beginning of time the criminal has been punished for his crimes. He has been a social outcast—a creature to be shunned and despised by his fellowmen. It is altogether just and proper that this should be so. He who knowingly violates the laws of his country or his state should pay the penalty—he deserves very little sympathy.

And so it should be with him who violates the laws of health. Through years of patient study in which lives have been willingly sacrificed for the advancement of medical science, certain very definite facts and rules have been established for the control and prevention of human suffering. These laws of health and right living are not imprac-

tical theories or "fads," but are simple, proven facts—easily understood and easily obeyed.

Typhoid fever, smallpox, malaria, consumption (some of the worst scourges of humanity) all are preventable diseases—preventable by obedience to the laws of health. The man who, by ignoring these laws, wilfully robs himself or his neighbor of health, the most precious of all earthly possessions, is just as truly a criminal as the murderer, the rapist or the thief. But instead of condemnation this man asks and receives SYMPATHY.

Your State Board of Health is teaching the fundamental laws of sanitation and health preservation to all who will heed. No citizen of Florida can plead, as his excuse, ignorance of these laws.

Isn't it about time that the breaker of the greatest of all laws be denied sympathy and regarded as what he really is—A CRIMINAL?

C. H. D.

INFANT MORTALITY CONFERENCE IN NOVEMBER.

The Fifth Annual Meeting of the American Association for Study and Prevention of Infant Mortality will be held in Boston November 12-14. The program will include sessions arranged by the Committees on Nursing and Social Work, Pediatrics, Vital and Social Statistics, Obstetrics, and Public School Education. The subjects to be discussed will include Prenatal Care, The Need for Increased and Improved Maternity Hospital Service, Institutional Mortality, and Continuation Schools for Home-Making.

An exhibit and special clinics will be held in connection with the meeting.

Further information in regard to the work of the Association can be secured from Miss Gertrude B. Knipp, Executive Secretary, 1211 Cathedral Street, Baltimore, Md.

DO IT NOW.

During the next few months while work on the farm is "slack" you will have plenty of time to spare; so why not build that FLY-PROOF PRIVY? Don't wait until spring but do it NOW and be prepared before next spring's crop of flies appears.

The State Board of Health will furnish you with plans and specifications, and the material will cost only a few dollars. What YOU must furnish is a little of your time, a little labor and a little INTEREST in your own welfare and that of your family.

CAN YOU BLAME HER.

"How is the law made?" asked the instructor in United States history.

"Oh," replied the maiden, cheerfully, "the Senate has to ratify it; and then the President has to—has to veto it; and then the House of Representatives has to"—she hesitated for a moment, and knit her pretty forehead.

"Oh, yes! I remember now," she said. "The House of Representatives has to adjourn until the next session!"—*Youth's Companion*.

HEADACHE.

BY DR. ALVAH H. DOTY.

(Medical Director, Employees' Benefit Fund Committee of the American Telephone and Telegraph Company.)

There is no more common affection than headache, or none less understood or more improperly dealt with, for it is commonly believed to be an independent malady and successfully treated as such. Nothing is further from the truth, for there is no condition which is so dependent upon some underlying cause as this ailment. Headache is simply a warning signal thrown out by nature to indicate a departure from the normal condition of health. While this is often due to some simple or transient cause such as prolonged exposure to the sun, over-indulgence in food or drink or want of sleep or a torpid condition of the bowels and may be of short duration, there are many instances where headache is more or less persistent and due to some more lasting affection or some organic disease. It is rather in connection with the latter group that this article is intended to deal, for there are many who suffer in this way and whose lives are made miserable and their work performed with great difficulty under these circumstances, and in order to obtain relief they become addicted to the use of drugs or so-called headache cures which unfortunately may be purchased almost anywhere.

HEADACHE "CURES" DANGEROUS.

This habit is not without injurious or dangerous results, for while temporarily relieving headache these so-called cures often mask some serious condition which should receive prompt and careful medical attention, besides the frequent or habitual use of drugs for this purpose is often associated with danger, for headache cures are usually composed of coal tar products which notoriously depress or weaken the heart and, although they may extend temporary relief, they are not curative and may often aid in increasing the underlying cause of this affection. It would surprise the public to know the extent to which headache cures are consumed, particularly by women.

It will repay those who frequently suffer from headache and who are in the habit of taking drugs to obtain relief to carefully consider some of the common causes of this affection and the proper and successful means of dealing with them.

As a class the so-called brain workers or persons whose duties involve unusual activity of this organ are far oftener affected with headache than others, for under these conditions there is apt to be an increased amount of blood in the brain which causes some undue pressure, besides the nerves connected with the brain become tired under constant use. While medicine may temporarily relieve the headache which frequently accompanies this condition it is not only not the proper treatment but sooner or later is quite apt to cause some unpleasant result, besides if any part of the body is overworked it must have rest rather than medicine. Furthermore, it must be borne in mind that many persons have heart disease for a long time before they are aware of it and as headache cures commonly contain heart depressants, fatal results not infrequently occur from this cause.

VALUE OF EXERCISE.

It is true that many persons who perform headwork during the day can not change the character of their business for the purpose of obtaining relief from headache, but they can employ nature's remedies for the prevention of this affection and at the same time secure better general health. These remedies are simple, healthy and easily carried out and relate to hygienic measures already referred to in previous articles concerning this subject. For instance, a daily walk of four or five miles, proper bathing or care of the skin, proper food and sleep, etc. Walking, which is the most valuable form of exercise, not only relieves the congested condition of the brain but rests this organ, invigorates the system, and aids in furnishing a capable resisting power which goes far to prevent headache.

Many who are closely confined in offices feel tired and exhausted and frequently have headache at the close of the day; this, however, is mental and not physical fatigue, for during the day the body is but little used, and as a rule the remedy for this condition is exercise, and it will usually be found that the feeling of fatigue is replaced by a refreshed condition after a good walk. It is very difficult for those who have not had personal experience in this direction to appreciate the great benefit derived from this practice. There is but little truth in the statement that night air is unhealthy, and exercise may be taken with great benefit in the evening if no opportunity is presented during the day for this purpose.

A very common cause of headache, particularly among those of sedentary habits, relates to a torpidity of the bowels resulting in constipation. This is often very persistent and hard to overcome. The headache accompanying this condition is due chiefly to the fact that the products of decomposition resulting from the digestion of food are not promptly removed from the intestinal tract and some are absorbed into the system, often with unpleasant and sometimes very injurious results. The more chronic form of constipation usually leads to the use of all forms of laxatives and cathartics which often injure digestion and debilitate the system.

The most valuable and effective treatment for constipation and the headache associated with it is exercise, for this is quite sure sooner or later to bring about an activity of the muscular coat of the bowels or intestines by which they regain their normal function. A long walk every day with a diet containing vegetables and fruit and but little meat is the hygienic way of dealing with this affection. A glass of cold or hot water upon rising in the morning or at bed time often extends considerable aid in overcoming constipation. While this plan is being carried out it is quite necessary to use some simple laxative in order that the bowels may act daily.

UNDERLYING CAUSE SHOULD BE REMEDIED.

If headache frequently occurs, even when the hygienic measures above referred to are faithfully carried out, a physician should be consulted, for there is probably some underlying cause present which is not apparent to a layman, for instance, defective eyesight, eye strain, or imperfectly fitting glasses; these are commonly the cause of persistent

headache, which may not only seriously interfere with health and happiness but business as well. In this condition it is not difficult to understand how useless and injurious are headache cures.

Headache is often due to some form of kidney disease which if early detected may be held in check; there are numerous other functional and organic diseases which may also cause headache and which can only be successfully dealt with by proper medical attention, for in this way not only will the headache be relieved but the general health of the patient improved.

In sickness and in certain other conditions the temporary use of drugs to relieve headache or quiet the patient is often indicated, but this is a matter decided by the doctor and not the patient.

Unfortunately, those who depend upon headache cures for the relief of this affection are not apt to seek permanent relief so long as they are able to secure partial benefit from drugs and cures which are very invitingly advertised to relieve all forms of headache, besides persons who frequently use these remedies gradually increase the dose, sometimes to a fatal extent.

Those who are subject to headache may be assured that permanent relief can, as a rule, be obtained if proper means are employed for this purpose, the most valuable and effective being the careful observance of the rules of personal hygiene. If headache continues, then competent medical advice should be secured and dependence not placed upon headache cures.

PLAQUE OPERATIONS, NEW ORLEANS.

The following condensation and summary of the weekly reports of Dr. W. C. Rucker, Assistant Surgeon General, Commanding, United States Public Health Service, in the plague operations at New Orleans for the four weeks ending September 12th, will be of interest:

Outgoing Quarantine:

Number of vessels fumigated	363
-----------------------------------	-----

Overland Freight Inspection:

Cars inspected	17,008
Cars rat-proofed	6,078
Cars condemned	34
Rodents killed in cars	1

Field Operations:

Number of rats trapped	34,920
Premises fumigated	44
Premises disinfected	185
Premises inspected	18,219
Poisons placed	723,678
Notices served	8,428
Buildings rat-proofed	677
Number of abatements	3,858

Laboratory Operations:

Rats examined	25,611
Mus Norvegicus	24,730
Mus Alexandrinus	338
Mus Rattus .....	.712
Mus Musculi	7,326
Unclassified—putrid	557
Total rodents received at laboratory	32,603

Number of suspicious rats.....	80
Plague rats confirmed	15
Suspicious human cases examined	22
Number of human plague cases.....	9
Total rodents captured to September 12.....	79,543
Total rodents examined to September 12.....	68,595
Total rodent cases to September 12.....	92
Total human plague cases to September 12.....	25

STATISTICS.

SMALLPOX.

Reported cases of smallpox in Florida, August, by counties (843 vaccine points distributed):

Hillsboro	1
Levy	1
Marion	1
Putnam	1
Volusia	1
Total cases smallpox, August.....	5
Total cases smallpox, January 1 to September 1.....	510

RABIES.

Report of rabies in Florida, August, by counties:

	<i>No. Persons Treated.</i>
Alachua	1
Duval	1
Gadsden	5
Hillsboro	1
Marion	1
Swanee	1
Number persons receiving Pasteur treatment, August.....	10
Number persons treated January 1 to September 1, 1914.....	72

VETERINARY DEPARTMENT.

GLANDERS.

No cases of glanders were diagnosed during August.

Total cases, January 1 to September 1, 1914..... 22

CATTLE TICK ERADICATION—CONSTRUCTION OF DIPPING VATS, AUGUST.

Clay county (at Highland)..... 1

DeSoto county (at Wauchula)..... 1

Volusia county (at Pierson)..... 1

Total number vats constructed in August..... 3

Total number vats constructed in Florida to September 1, 1914 44

HOG CHOLERA SERUM ADMINISTRATION, AUGUST, 1914, BY COUNTIES.

County.	C. C. Serum Distributed.	Number of Hogs Serum requested for.	Total Weight of Hogs to be treated.
Alachua	43,700 c.c.	1,731	118,515 pounds
Bradford	17,350 c.c.	725	46,750 pounds
Columbia	5,950 c.c.	262	15,566 pounds
Dade	450 c.c.	14	1,190 pounds
DeSoto	5,250 c.c.	205	13,375 pounds
Gadsden	1,150 c.c.	58	2,580 pounds
Carried forward ...	73,850 c.c.	2,995 hogs.	197,976 pounds

<i>Brought forward</i>	73,850 c.c.	2,995 hogs.	197,976 pounds
Hamilton	9,900 c.c.	375	27,875 pounds
Hernando	8,750 c.c.	380	23,600 pounds
Hillsboro	3,850 c.c.	192	8,980 pounds
Jackson	3,300 c.c.	132	6,600 pounds
Lafayette	15,800 c.c.	698	41,640 pounds
Lake	400 c.c.	20	600 pounds
Levy	7,800 c.c.	365	17,250 pounds
Madison	5,000 c.c.	202	12,040 pounds
Marion	8,150 c.c.	348	19,335 pounds
Osceola	1,850 c.c.	75	4,500 pounds
Pasco	6,100 c.c.	188	14,030 pounds
St. Johns	2,900 c.c.	110	9,360 pounds
Sumter	3,650 c.c.	125	10,875 pounds
Suwanee	23,050 c.c.	947	59,460 pounds
Taylor	2,250 c.c.	85	7,125 pounds
Wakulla	600 c.c.	30	1,500 pounds
Totals	177,200 c.c.	7,267 hogs.	462,746 pounds

SPECIMEN EXAMINATION, BACTERIOLOGICAL LABORATORIES.

	Jacksonville.	Tampa.	Pensacola.	Total.
Animal parasites	238	100	34	372
Diphtheria	222	50	14	286
Gonorrhoea	70	46	22	138
Malaria	270	191	34	495
Pathological	6	3	4	13
Rabies	8	1	..	9
Tuberculosis	100	74	37	211
Typhoid fever	282	141	42	465
Water (for sewage contamination)	24	6	2	32
Miscellaneous	37	16	12	65
Rat examinations	..	84	2,275	2,359
Totals	1,257	712	2,476	4,445

Grand total number specimens examined by laboratories of the State Board of Health during August, 1914..... 4,445

DISTRIBUTION OF DISEASES DIAGNOSED IN AUGUST.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

—MALARIA—

Town.

	Diphtheria.	Gonorrhoea.	Estivo-autumnal.	Quartan.	Terrian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Arcadia	1	..	..	..	..	..	..	..	..	1
Archer	..	..	..	..	..	..	..	..	1	1
Bayard	..	..	..	..	..	..	..	..	1	1
Bowling Green	..	..	..	..	..	..	..	..	1	1
Bushnell	..	..	..	..	..	..	..	1	..	1
Center Hill	..	..	..	..	..	..	..	..	1	1
Citra	..	..	..	..	..	..	..	1	..	1
Cocoa	..	..	..	..	..	..	..	..	1	1
Crescent City	..	..	..	..	..	..	..	..	2	2
Daytona	6	..	..	..	..	..	..	1	..	1
Daytona (released cult.)	3	..	..	..	..	..	..	..	..	3
<i>Carried forward</i>	10	..	..	..	..	..	3	..	8	21

Distribution of Diseases Diagnosed in August—Continued.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

Town.	Diphtheria.	MALARIA					Typhoid.	Tuberculosis.	Uncinaria.	Total.
		Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined				
Brought forward	10	:	:	:	:	:	3	:	8	21
DeFuniak Springs	1	:	:	:	:	:	:	:	:	1
DeFuniak Springs (release cult.)	1	:	:	:	:	:	1	1	:	2
Delray	:	:	:	:	:	:	1	1	:	2
Dunnellon	:	:	:	:	:	:	1	3	3	3
Fairfield	:	:	:	:	:	:	1	1	1	1
Fernandina	:	:	:	:	:	:	1	1	1	1
Fort Ogden	:	:	:	:	:	:	1	1	1	1
Freeport	:	:	:	:	:	:	3	3	3	3
Galliver	:	:	:	:	:	:	1	1	1	1
Gainesville	6	3	..	..	1	2	1	..	13	..
Gainesville (release cult.)	3	:	:	:	1	2	1	..	3	3
Grandin	:	:	:	:	:	:	3	3	3	3
Greensboro	:	:	:	:	:	:	1	1	1	1
Gretna	:	:	:	:	:	:	4	4	4	4
Greenville	:	:	:	:	:	1	1	1	1	1
Hernando	:	:	:	:	:	1	1	1	1	1
Inglis	:	:	:	:	:	1	1	1	1	1
Islamorada	:	:	:	:	:	1	1	1	1	1
Jacksonville	7	8	2	..	2	1	19	15	22	76
Jacksonville (re- lease cult.)	2	:	..	..	..	..	2	..	..	2
S. Jacksonville	:	:	:	:	:	2	..	..	1	1
Jasper	:	:	:	:	:	1	1	1	1	1
Kissimmee	:	:	:	:	:	1	1	1	3	3
Lake Butler	:	:	:	:	:	2	2	5	6	6
Lake City	:	:	:	:	1	1	1	1	1	3
Leesburg	:	:	:	1	1	2	1	1	2	2
Live Oak	:	:	:	1	1	2	1	1	1	5
Mandarin	:	:	:	:	:	1	1	6	7	7
Madison	1	:	:	:	:	1	1	1	1	1
Melbourne	:	:	:	:	1	1	1	3	3	3
Melrose	:	:	:	:	1	1	1	1	2	2
Micanopy	:	:	:	:	1	1	1	2	2	2
McIntosh	:	:	:	:	1	1	1	1	1	2
New Smyrna	:	:	:	:	1	1	1	1	1	2
Ocala	3	1	..	..	1	1	1	1	..	6
Oklawaha	:	:	:	:	1	1	1	1	1	1
Orlando	2	1	..	..	1	2	2	4	10	10
Oxford	:	1	..	..	1	1	1	1	1	1
Palatka	1	:	..	..	1	2	2	1	3	3
Pine Mount	:	:	..	..	1	6	..	1	1	1
Plant City	1	1	..	..	1	6	..	4	13	13
Princeton	1	1	..	..	1	..	..	2	3	3
Quincy	1	..	..	..	1	..	..	..	1	1
Rocks Bluff	:	..	..	..	1	..	..	1	1	1
St. Augustine	1	..	..	..	1	..	..	1	3	3
Carried forward	37	16	4	..	6	4	48	23	87	225

Distribution of Diseases Diagnosed in August—Continued.

REPORT OF TAMPA LABORATORY.

—MALARIA—

Town.

	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Brought forward	37	16	4	..	6	4	48	23	87	23
Sebastian	..	..	..	..	..	..	..	..	5	5
Starke	..	..	..	..	..	..	1	..	1	2
Sutherland	..	..	..	..	..	..	..	..	1	1
Tallahassee	5	1	..	..	..	1	3	..	1	14
Trenton	..	..	..	..	..	..	1	..	..	1
Wauchula	..	..	..	..	..	..	1	..	..	1
Welaka	..	..	..	..	..	..	..	..	2	2
Wildwood	..	..	..	..	..	..	1	..	..	1
Williston	..	3	..	..	..	..	..	..	1	4
Total	42	20	4	..	6	5	54	27	98	256

REPORT OF TAMPA LABORATORY.

Tampa	2	17	..	..	3	..	8	14	10	54
West Tampa	..	..	..	..	..	..	..	..	3	3
Blitchton	..	..	..	..	..	..	..	1	..	1
Sarasota	..	..	..	..	..	..	..	2	..	2
Lakeland	..	..	..	..	..	..	..	1	..	1
Wauchula	..	..	..	..	..	..	1	..	1	3
Plant City	2	..	..	..	..	..	..	1	4	7
Webster	1	..	..	..	..	..	..	..	..	1
Palmetto	5	..	..	..	..	..	1	..	..	6
Brooksville	1	..	..	..	..	..	..	..	..	1
Brooksville (release cult.)	3	..	..	..	..	..	..	..	..	3
Zephyrhills	..	..	..	..	..	..	..	..	1	1
Arcadia	..	..	..	..	..	..	1	..	..	1
Bartow	..	..	..	..	..	..	1	..	..	1
Total	14	17	..	..	3	..	12	20	19	85

REPORT OF PENSACOLA LABORATORY.

Bagdad	..	..	..	..	..	..	..	2	..	2
Campbelltown	..	..	..	..	..	..	..	..	1	1
Pensacola	3	..	..	..	..	1	4	4	10	22
Freeport	..	..	..	..	..	..	..	..	2	2
Sneads	..	..	..	..	..	..	..	..	3	3
St. Andrews	..	..	..	..	..	..	..	..	1	1
Starke	..	..	..	..	..	..	..	1	..	1
Crestview	..	..	..	..	..	..	..	..	1	1
Total	..	3	..	..	..	1	4	7	18	33

Total cases of principal diseases diagnosed by laboratories of the State Board of Health during August:

	Diphtheria.	Gonorrhœa.	Malaria.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Central Laboratory	33	20	15	54	27	98	247
Tampa Laboratory	11	17	3	12	20	19	82
Pensacola Laboratory	..	3	1	4	7	18	33
Total for State	44	40	19	70	54	135	362

VITAL STATISTICS.

FLORIDA MUNICIPALITIES AND THE MODEL ORDINANCE. THE REGISTRATION CITIES.

The July issue of *HEALTH NOTES* gave a statement of the legal requirements for registration of births and deaths in the 29 Florida Registration Cities, those of 2,000 population and over, especially as to their adoption of the Model Ordinance.

Since then Lake City, Lakeland, Live Oak and St. Augustine have passed it, and in Miami it is in process of passage. In Bartow, Daytona, DeLand and Sanford it is being carefully considered and may be passed before this is read.

Kissimmee, Marianna, Palatka and West Tampa are the only Registration Cities where this office is without reports of an active local campaign for this needed uniform legislation; of these the last named is practically part of Tampa and is likely soon to be merged with it and is now reporting quite accurately.

From this it will be seen that practically all of these Registration Cities, a list of which with their populations was printed in the February, 1914, *HEALTH NOTES*, have or soon will have in force the essentials of the model law.

OTHER FLORIDA MUNICIPALITIES.

As far as known by this office there are 195 incorporated cities and towns in the State, a large majority of which exist by virtue of special acts of the legislature, the remainder by incorporation under the General Law. A tentative list of all of these is now being prepared and will soon be published.

At the end of this article is given a list of the 53 municipalities of from 500 to 2,000 inhabitants on April 15, 1910, with their populations as published in the United States Census of that year. There may be a few more which should be added, having been incorporated since that date, and some few of the list may possibly have surrendered their charters since then. Any such information will be welcomed by this office to help in the compilation and keeping up of an accurate list.

All of these 53 cities and towns should promptly institute the collection of Vital Statistics by availing themselves of the offer of this Board to assist and pay for records of births and deaths. Every community should have these reports to save preventable deaths and sickness and to preserve the two most important facts of the existence of each of its inhabitants, and each of these communities of 500 and over is growing, with Florida's rapid increase, and is likely soon to be a city in reality as well as on the map. To help this increase, both by immigration and births, health conditions should be made so favorable and so well shown in reliable comparative statistics, as to attract homes寻求者.

Among the remaining 113 municipalities under 500 population, there are many rapidly growing, progressive communities which will no doubt realize the value of the plan and immediately start the work. For there is no community, no matter how small, which should not make these collections. Witness the State of Arizona, with an area four times as great and a population one-quarter the size of Florida,

where birth and death registration has been statewide, rural as well as urban, for several years under a form of the Model State Law.

THE MODEL ORDINANCE.

To all of the cities and towns in Florida has just been sent a revised draft of the Model Ordinance with a letter of explanation and appeal to proceed with these collections. The ordinance has been most carefully drawn and prepared and those municipalities whose councilors pass favorably upon the institution of the system have but to fill out minor omissions and enact it into law. Needless to say, it will not by enactment become self-enacting, but its passage is the first step and after passage public sentiment should ensure its enforcement.

The explanatory letter follows this, and it and the Model Ordinance will be sent to any one or to any address upon request.

The following of the smaller communities have already passed ordinances: Sarasota, West Palm Beach, South Jacksonville and Pablo Beach, the latter with only 330 inhabitants by the 1910 census; others of which this office has not as yet received reports will in all probability by the time this is before its readers have taken like action. Requests are rapidly coming in for information and instructions showing the interest aroused throughout the State and the value placed upon these statistics.

Let us hope this is the beginning of a plan which will before long give Florida complete reports of all her births and deaths, to be followed soon with reports of all preventable sickness.

* * * * *

JACKSONVILLE, FLA., September 19, 1914.

The accompanying suggested draft of an ordinance for the registration of births and deaths contains the essentials of the Model State Law advocated by the United States Bureau of the Census and now in force in many States and being urged in the others.

This Model Ordinance has been prepared by this office for Florida municipalities from a form drafted by the Bureau of the Census. It has been passed, in some cases with unimportant alterations, by a majority of the Registration Cities of 2,000 population and over which did not already have adequate requirements to insure complete reports of births and deaths; the few remaining Registration Cities are confidently expected to pass it in the near future.

The present draft should be completed by insertion of omitted words and provisions, with any alterations necessary, upon advice of legal counsel as to the powers of the municipality under its charter. It is strongly urged that adequate penalties be prescribed to insure its respect.

Sections 1, 2 and 3 are the most important and should not be altered; in Section 4 the report of violations may be made to the mayor where there is no municipal attorney.

Other sections providing for the repeal of any ordinances or parts of ordinances conflicting, and for the ordinance taking effect upon approval of the mayor and publication or posting may be added.

The State Board of Health offers its assistance to all Florida municipalities in instituting and putting into operation the greatly needed collection of Vital Statistics, especially the records of births and deaths as outlined in the August, 1914, issue of HEALTH NOTES, and trusts that each incorporated city and town in the State will promptly avail itself of the offer and thereby make permanent the evidence of births and deaths of its inhabitants and compile accurate data as to its health conditions.

JOSEPH Y. PORTER,

State Health Officer and Registrar of Vital Statistics.

FLORIDA MUNICIPALITIES OF 500 TO 2,000 POPULATION ACCORDING TO
1910 UNITED STATES CENSUS.

<i>City or Town.</i>	<i>County.</i>	<i>Pop.</i>	<i>City or Town.</i>	<i>County.</i>	<i>Pop.</i>
Bradentown	Manatee	1,886	Bonifay	Holmes	922
Monticello	Jefferson	1,829	Eustis	Lake	910
West Palm Beach	Palm Beach	1,743	Carrabelle	Franklin	900
Arcadia	DeSoto	1,736	Titusville	Brevard	868
Jasper	Hamilton	1,730	Cedar Key	Levy	864
Madison	Madison	1,560	Sarasota	Manatee	840
High Springs	Alachua	1,468	Milton	Santa Rosa	831
Mulberry	Polk	1,418	Newberry	Alachua	816
Port Tampa City	Hillsborough	1,343	Noma	Holmes	806
Fort Pierce	Saint Lucie	1,333	Ormond	Volusia	780
Green Cove Springs	Clay	1,319	Palmetto	Manatee	773
Dunnellon	Marion	1,227	Greenville	Madison	751
White Springs	Hamilton	1,177	Graceville	Jackson	734
Clearwater	Pinellas	1,171	Lake Butler	Bradford	685
Fort Meade	Polk	1,165	Crescent City	Putnam	677
South Jacksonville	Duval	1,147	St. Andrew	Bay	675
Starke	Bradford	1,135	Lake Helen	Volusia	646
New Smyrna	Volusia	1,121	Crystal River	Citrus	633
Chipley	Washington	1,099	Cocoa	Brevard	613
Wauchula	DeSoto	1,099	Micanopy	Alachua	613
Dade City	Pasco	1,066	Alachua	Alachua	610
Perry	Taylor	1,012	Hernando	Citrus	593
Punta Gorda	DeSoto	1,012	Mayo	Lafayette	573
Leesburg	Lake	991	Winter Park	Orange	570
Manatee	Manatee	988	Blountstown	Calhoun	543
Brooksville	Hernando	979	Waldo	Alachua	540
			Sneads	Jackson	506

ANOTHER VALUE OF VITAL STATISTICS.

"Springfield, Mo., Aug. 29.—Club women of Springfield who are active in the 'Save-the-Babies' campaign inaugurated here recently, have decided to trail the stork in his visits to Springfield homes.

"They have arranged with the Vital Statistics Bureau, at Jefferson City, for immediate access to the records of births in Springfield so that mothers may be reached at once and offered suggestions and assistance for the proper care of babies in guarding against diseases of the summer months."

This item, from *Hearst's Sunday American*, points clearly to another great value of vital statistics which is often overlooked.

Prompt and complete reports of births occurring in Florida would enable the State Board of Health to accomplish a volume of educational work which is at present impossible.

THE BARN THAT JACK BUILT



This is the Barn that Jack built.



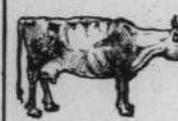
This is the Outhouse
That stood by the Barn that Jack built.



This is the Filth
That lay by the Outhouse
That stood by the Barn that Jack built.



This is the Fly with his dirty Feet
That was bred in the Filth
That lay by the Outhouse
That stood by the Barn that Jack built.



This is the Pail
That carried the Fly
That was bred in the Filth
That lay by the Outhouse
That stood by the Barn that Jack built.



This tubercular Cow with the crumpled Horn
Was milked into the Pail
That had carried the Fly
That was bred in the Filth
That lay by the Outhouse
That stood by the Barn that Jack built.



This is the Milker, all dirty and torn,
Who milked the sick Cow with the crumpled Horn
Into the Pail
That had carried the Fly
That was bred in the Filth
That lay by the Outhouse
That stood by the Barn that Jack built.



This is the Dealer, all shaven and shorn.
Who hired the Milker, all dirty and torn.
Who milked the sick Cow with the crumpled Horn
Into the Pail
That had carried the Fly
That was bred in the Filth
That lay by the Outhouse
That stood by the Barn that Jack built.

THIS IS THE BABY — sick and forlorn ! —
Who had Milk from the Dealer, all shaven and shorn
Who hired the Milker, all dirty and torn,
Who milked the sick Cow with the crumpled Horn
Into the Pail
That had carried the Fly
That was bred in the Filth
That lay by the Outhouse
That stood by the Barn that Jack built.

IF THIS
WERE BUILT FOR
DAIRY PURPOSES

IF THIS
WERE GONE

IF THIS
WERE SCREENED

IF THIS
WERE SWATTED

IF THIS
WERE COVERED

IF THIS
WERE HEALTHY

IF THIS
WERE CLEAN

IF THIS
WERE HONEST



THIS
WOULD BE
WELL !

P. A.R.

J.W.S.

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State Board of Health Building,
Florida Avenue and Constant Street, Tampa.
City Hall, Pensacola.

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Any information you want about communicable diseases of domestic animals
we will help you to get.

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*Individual responsibilities, properly discharged, can do more than legislation
and health officials to make homes clean and sanitary.—North Carolina Health
Bulletin.*

LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION.

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23".
 Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30".
 Publication 76, Hookworms, leaflet, revised August, 1910.
 Publication 77, The Housefly, Second Edition, May, 1914, pp. 11.
 Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
 Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
 Publication 88, Typhoid Primer, December, 1911, pp. 45.
 Publication 89, Hog Cholera, January, 1912, pp. 12.
 Poster 90, Smallpox Vaccination, April, 1912, 18"x24".
 Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
 Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
 Publication 96, Medical Inspection of Schools, June, 1912, pp. 13.
 Publication 97, Lung Worms and Hog Cholera, 1912, leaflet.
 Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
 Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
 Publication 101, President's Letter of Transmittal, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 12.
 Publication 102, Typhoid Fever in Tampa, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 24.
 Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
 Publication 104, Hookworm Disease, March, 1913 (Second Edition), pp. 70.
 Publication 105, Malaria, April, 1913, pp. 8.
 Publication 106, Mosquitoes, May, 1913, pp. 16.
 Publication 107, Facts About Hog Cholera Serum and its Distribution, December, 1913, pp. 4.
 Publication 108, Diphtheria, March, 1914, pp. 4.
 Publication 109, Measles, March, 1914, pp. 4.
 Publication 110, Scarlet Fever, March, 1914, pp. 4.
 Publication 111, Smallpox, March, 1914, pp. 4.
 Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
 Publication 113, Hog Cholera Serum, April, 1914, pp. 8.
 Publication 114, Annual Report of the Veterinary Division of the State Board of Health of Florida, 1913, Reprint from the Twenty-Fifth Annual Report of the State Board of Health of Florida, May, 1914, pp. 65.
 Publication 115, Annual Report on the Treatment of Indigent Crippled Children, 1913, Reprint from Twenty-Fifth Annual Report of the State Board of Health of Florida, May, 1914, pp. 8, inserts 12.
 Publication 116, Address of the Chairman of the Section of Preventive Medicine and Hygiene, Dr. Joseph Y. Porter, Southern Medical Association, Lexington, Ky., November 17-20, 1913, Printed in Southern Medical Journal February, 1914, Reprint from Twenty-Fifth Annual Report of the State Board of Health of Florida, May, 1914, pp. 15.
 Publication 117, Imhoff Tanks, May, 1914, pp. 6.
 Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
 Publication 119, Anti-typhoid Vaccination in the Army in 1913, June, 1914, pp. 7.
 Consumption Leaflet, June, 1914.
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State Board of Health Notices and Circulars:
 Notice of Change in Regulations Governing Distribution of Hog Cholera Serum, September 25, 1914.
 Instructions to Agents Regarding the Simultaneous or Double Method Treatment for Hog Cholera, October 1, 1914.
 Partial List of Nearby Plants Selling Hog Cholera Serum and Virus.
 Vital Statistics—Model Ordinance and Circular Letter.
 Vital Statistics—List of Florida Municipalities.

THE DECLINING DEATH RATE.

Dr. Frederick L. Hoffman, Statistician for the Prudential Life Insurance Company, in a recent pamphlet entitled, "The Significance of a Declining Death Rate," calls attention again to the unprecedented rate of increase in the population of the world, due to the fall in the death rate and the consequent lengthening of the average human life. Dr. Hoffman estimates the present population of the world at 1,750,000,000, and its annual increase at 12,883,000, amounting in Europe and America to 12.7 per 1,000 in 1910, more than double the annual rate of increase in 1810. This increase in the rate is entirely due to the fall in the death rate, which has been observed in all countries, Asiatic as well as Western. The rate in the principal civilized countries has fallen from 29.09 per 1,000 in the five years ending 1885 to 19.26 per 1,000 in the five years ending in 1910. This decline has been almost entirely at the age periods under 35 years. From 35 to 55 years of age the death rate has remained about stationary, while above 55 it has increased. The causes of the decline in the death rate are progress in sanitation and the discoveries of Pasteur, Koch, Ross, Reed and others. Cholera, malaria, plague, smallpox, typhoid fever and yellow fever are no longer a serious menace in civilized countries, as their nature and mode of transmission are understood. For example the death rate from typhoid fever has been reduced from 35.9 per 100,000 in 1900 to 16.5 in 1912.

Coincident with the decline in the death rate is the decline in the birth rate, particularly among the well-to-do. The birth rate in Australia fell from 35.4 per 1,000 of population in 1886 to 27.2 in 1911. In France the birth rate has fallen from 23.9 to 18.7 in the same period. It is considered desirable for a country to have a low birth rate and a low death rate, as this condition involves less waste of human energy.

Dr. Hoffman believes that the rate of population increase will be greater in the future than in the past, and this will make more acute the problem of a food supply. The production of cereal crops has, however, increased more rapidly than the population. The world's wheat crop increased 45 per cent from 1895 to 1912, the population increasing 12.6 per cent in the same period. Rye, barley, corn and oats show a similar gain. The world's rice crop has increased 91.2 per cent from 1900 to 1911, as compared with an increase of 8.8 per cent in the population.

The rapid increase in population makes it of vital importance to conserve the food producing resources in land and sea, to use improved methods in food production, to prevent waste, to utilize waste and by-products, to provide for rational town planning, to educate in practical domestic economy, to establish a rational control of marriage, fecundity and divorce, to bring about improved methods of general education, better physical training and medical supervision, to improve local health administration, to inculcate higher ideals of life conceived as social service to conserve the economic utility of longevity, and

in general to establish higher educational ideals.—*Monthly Bulletin, Ohio State Board of Health.*

TO OUR MEDICAL FRIENDS.

It is so easy to complain, find fault and to charge neglect to the officials of the State Board of Health, especially to the Laboratory Division, when a little wee bit of inquiry would bring out the fact that the "kickers" were nine times out of ten the offenders, that the Executive Office embraces a recent instance to "point a moral" if not embellishing a tale. The following correspondence succinctly explains. For sufficient and well considered reasons, names and addresses are omitted:

State Board of Health, Jacksonville, Fla.

GENTLEMEN: I promised several of our citizens, including one or two physicians, that I would write you and ask if there was anything that could be done that would enable these citizens to get more prompt reports from the Bacteriological Laboratory. In diphtheria suspects most of our physicians wait until they get a telegraphic report from you before they report the case to me for quarantine, which is not in accordance with our requirements, and we will and have arrested each offender "when caught." I have explained to all who have come to me that a culture has to be grown, etc., which takes time, but they say that more time than is necessary is being used somewhere by some one. I also explained that sometimes the specimen is delayed in the mails, etc.; in fact, I have stood up for you at all times realizing that you can't afford to be negligent when so much is dependent on you. Dr. _____ has asked me to withhold his name as a "kicker" and I will ask that you not give me away to him as having mentioned his name. He told me this morning that the report on the _____ child and the one sent in a couple of days ago for the _____ child were very much delayed.

Another doctor in town is complaining but asked me to withhold his name. Mrs. _____ says that a report sent in for her child one time before (she didn't say when) was similarly delayed. I have been satisfied that you were doing your duty at all times.

Yours truly,
_____, M. D.,
City Health Officer.

Dr. _____, City Health Officer, _____.

DEAR DOCTOR: Your letter of the 24th to the State Board of Health has been referred to me for answer. I am always glad to have any complaint or criticism which may help to improve the efficiency of our service. We hope as far as possible

to make our reports prompt and to give good, satisfactory results.

The condition of which you speak is one which has given us a great deal of concern on many occasions and it seems at times to be difficult to adjust and this is especially true so far as diphtheria examinations are concerned. We have tried to rearrange our mail collection in such a way that we will get specimens as soon as they are distributed at the postoffice, and usually report on these by wire; in fact, we always report by wire where the physician indicates that he wishes a telegraphic report. We, of course, can not report by wire unless the physician demands it since the State Board of Health does not pay for telegraphic reports on specimens sent in to the laboratory for examination.

If the doctors who patronize the laboratory would be careful to observe their train schedule and be sure that the specimen was promptly mailed as soon as collected, I think some of the delays would be avoided. For instance, there are times when a specimen might be collected and dropped in the postoffice but the mail for the outgoing train at that time is probably made up and is on the way to the station. The specimen which is dropped in the postoffice at such time would not leave your city until the following mail. If such should occur in the morning the specimen would not leave _____ until about three o'clock in the afternoon and get to Jacksonville too late to be distributed for us to get the specimen before the next morning. There is an instance where twenty-four hours was lost in _____.

On the other hand, if the specimen had been collected in the morning fifteen or twenty minutes before train time and the doctor had taken the specimen to the train it would have reached us at noon on the same day and with a positive swab we could have wired report on that specimen the same afternoon. If it had to be cultured the report would have been ready early the following morning.

It is very important that the required amount of postage be put on these specimens because even if a specimen had been mailed on the morning train and an insufficient amount of postage placed on the specimen it would have been held up in Jacksonville until all the prepaid mail had been distributed, and then these postage due specimens would have been stamped and distributed too late in the day probably for us to get them in our last mail in the evening. We have repeatedly had instances of this kind. For instance, this morning we received two specimens from your city, envelopes from which I am enclosing, each with postage due. As it happened, these were mailed in the afternoon yesterday and got in here during the night when the night force had time to stamp and distribute them so that we got them on the morning mail. If these same specimens had reached Jacksonville on the forenoon mail yesterday they

would in all probability have been held and would not have reached us until this morning.

Postage due specimens are a constant source of annoyance for these very reasons. We have often received diphtheria specimens with postage due and they have in most instances reached us twelve hours later than they should have if the postage had been prepaid, and on account of having to plant these cultures the report has been delayed twenty-four hours.

I hope to do everything in my power to correct these results so far as the laboratory is concerned and have already instructed the Assistants in the laboratory that specimens which require telegraphic reports shall be promptly examined, and wired as soon as results are known.

While I regret very much that occasions for kicks come up, I have noticed in many instances that the "kickers" themselves are often very serious offenders. Many of them have been guilty of sending specimens postage due. I remember a specific instance along this line from Daytona where a certain doctor sent a swab requesting a telegraphic report. He only put two cents postage on the mailing can and these mailing cans all require six cents postage. The consequence was that the specimen was held in the postoffice twenty-four hours before it reached us. As soon as the specimen was received it was planted and culture examined as soon as sufficient growth had taken place, and the result wired. The doctor refused to pay for the wire on account of the delay. The delay was his own fault, namely, on account of the postage due.

I am not speaking of these things simply in order to justify myself but to show you that there are many sides to the problem, and with the desire to cooperate and to have cooperation in this work.

Yours very truly,

(Signed) HENRY HANSON,
Senior Bacteriologist.

One of the inmates of the state insane asylum rushed up to an attendant of the institution the other day and asked for a bottle of mayonnaise dressing.

"What do you want mayonnaise dressing for?" asked the attendant.

"I want to sprinkle it upon myself and make a nut salad," said the insane man.

A philosopher and a wit were crossing the water when, a high gale arising, the philosopher seemed under great apprehension lest he should go to the bottom.

"Why," said his friend, "that will suit your genius to a tittle; as for my part, I am only for skimming the surface of things."—*Floridian.*

SANITATION EDUCATION.

In no respect do the people of Florida need practical education more than in the value and importance of health and sanitation.

The problems that Florida has to meet are those that are common to all the South, with the added complications that her ports are important gateways into the United States for the commerce of the West Indies and many South American countries. Only those who know the accomplishments of the past twenty-five years can realize what has been done by Florida's Health Board in the practical solution of some of these problems. But the relations between this and other countries in health matters are better understood than they were a quarter century ago, and their control has been put on a practical and not a theoretical basis.

Florida's great health problem at present is the elevation to higher efficiency of the methods of sanitation, of the prevention of disease, of avoiding diseases that are clearly preventable, and in order to accomplish these results, to educate the people to the importance of careful and sanitary living.

Of immense educational value to Florida will be the annual gathering of the American Public Health Association, which is to be held at Jacksonville during the first week of December. This convention is to be the first of this association to be held in the Far South in the United States, and the first south of Baltimore. It has a membership of two thousand of the highest physicians and sanitary workers in the United States, Canada, Mexico and Cuba. The program is to be devoted to the discussion of the health matters that especially concern the South, as hookworm, pellagra, bubonic plague, malaria, trachoma, typhoid, rural sanitation, child welfare, fly extermination and many others of almost equal interest.

In connection with this convention Jacksonville medical authorities are planning a Southern Health Exhibition, the first of its kind ever undertaken in this country, to illustrate graphically by charts, photographs, models, panels and by other means, the methods that have been adopted by the most skilled workers to control these various ailments.

In preparing this exhibition, cooperation has been promised by the health boards of nearly every southern state, of many southern cities, by the Rockefeller Foundation, the Red Cross, the National Public Health Service, the United States Department of Agriculture, the National Mouth Hygiene Association, and several other organizations of this high class. Florida's Board of Health will send an exhibit of its work along certain lines, which is to become part of a larger exhibit that will be sent over the country for educational purposes.

Jacksonville's City Board of Health is preparing several exhibits, one of which will illustrate its splendid campaign against typhoid fever. More than fifty health boards and other organizations from every part of the South have promised active cooperation in this exhibition. These will show the practical accomplishments that have

been gained by each in some particular lines of sanitation and will be rarely suggestive even to the non-professional student and observer.

These approaching gatherings for the advancement of health conditions, being held in a Florida city, will offer unexampled opportunity to Florida statisticians, sociologists, sanitarians, nurses, physicians and municipal authorities to study and discuss these problems with men and women who are devoting their lives to solving them, and the municipalities of the State should send representatives from their health boards to study and profit from this exhibit.

ATTORNEY GENERAL'S OPINION ON FREE DISTRIBUTION OF HOG CHOLERA SERUM.

In reply to an inquiry from the State Health Officer, the following letter was received from the Attorney General of Florida, giving his opinion on the intent of the statute providing for the free distribution of hog cholera serum to the farmers of the State:

TALLAHASSEE, FLA., September 25, 1914.

Hon. Joseph Y. Porter, State Health Officer, Jacksonville, Fla.

MY DEAR SIR: Yours of the 16th inst. has been received. I note your inquiry as follows:

"The demand for free hog-cholera serum on the part of our farmers, has reached such proportions that this Board must seek some means of limiting the amount of serum which it will supply. At the present rate of distribution of serum it will require probably one-fourth of the income of this Board, this year.

"Will you be kind enough to express an opinion upon the point as to whether the State Board of Health can under the present law, Chapter 6167, 1911, decide the amount it will supply to an applicant?"

The statute on the subject, Chapter 6167, Acts of 1911, is in the following language:

"Section 1. The State Board of Health is hereby authorized and empowered to establish, maintain and operate a plant for the protection and distribution of hog cholera serum for the purpose of distribution to the farmers of this State upon application therefor.

"No cost shall be charged by the State Board of Health for the hog cholera serum so distributed."

Replying to your inquiry I will say that while the furnishing of hog cholera serum to the farmers of this State is a matter of great public importance, it is relatively of less importance than the protection and preservation of the health of the people of the State and, therefore, I would say that the legislature could hardly have intended that your Board should use so much of its annual income in furnishing such serum to the farmers as would interfere with the necessary work of the Board in looking after the public health.

The necessary conclusion is that while as much of the fund as possible should be used for the first named purpose, this

should not be done to the disadvantage and neglect of the other, and my judgment is that the law should be thus interpreted.

Respectfully,

(Signed) T. F. WEST,

Attorney General.

HOME TREATMENT OF TUBERCULOSIS.

Fresh, clean air is the best antidote for pulmonary tuberculosis in every step of its development.

It isn't a cure for the advanced stages—no one claims that—but in the earlier approach of the disease it may ward it off and effect a practical cure.

It has been said by high authority that one person in every seven is affected by this disease at some time in his life, that the scars would be revealed by post mortem examination. In a large number of such cases the vitality of the individual and the proper care are sufficient to counteract the advance of the disease beyond the beginnings.

It is an established fact that fresh air, uncontaminated by the poisons that float about us everywhere in the environments of what we call our highest civilization, is the best preventive of diseases in general. The oxygen of the air works destruction to many varieties of disease germs, and particularly is this true of tuberculosis.

The fresh air treatment has many advantages. It is cheap—cheaper than drugs—it is within the reach of all, and it becomes merely a matter of recognizing the fact and of applying it. Every obstruction that prevents the free circulation of the out-of-door air to our living, whether we are awake or asleep, lessens the active efficiency of the cure. This fact has been recognized by medical science to the extent that large sums of money appropriated for the erection of great sanitaria for the treatment of the disease, remain unexpended in more than one northern state.

In the great federal prison at Atlanta, all tubercular patients are separated from their fellow prisoners and are made to live in the open air, in tents, under guard within the walls that surround the institution. The results have been a splendid demonstration of the value of the treatment.

There are hundreds and thousands of persons in humble circumstances who fear even the incipient case of tuberculosis as the fore-runner of certain death. To some extent, even a large extent, this fear is unnecessary, for with the easy availability of fresh air, there is the possibility, even, in some cases, the probability of a cure.

Two things are essential—one, is to secure, so far as possible, the welfare of the patient; the other, to protect those who are about him.

Tuberculosis is very rarely communicated in open air, and there only by dry sputum. This makes association with the patient by those who attend him, safer out of doors than within solid walls.

Few families or persons are so poor that they can not provide a tent or other protection in the yard surrounding the home or in some easily accessible place. The essential is that the air shall have free

circulation, and protection is needed only against rain or the hot sun. In the tent, which should be floored and furnished comfortably, but not elaborately, the patient should sleep and live. Here his meals should be eaten and not with the family. The linen of his bed and his clothing should be washed separately from that of the family, and every precaution should be taken for the protection of others.

In this way the tubercular patient may have the benefit of home cooking, of home care; his mind may be occupied with home interests, and the mental occupation and diversion from his own troubles are no small part of the cure. And better yet, his separation from other tubercular patients is important, for such association, as in a sanitarium, is a detrimental influence.

The home treatment of tuberculosis, the constant saturation in fresh air, are within the resources of the humblest, or they may be obtained almost everywhere with outside assistance. A recognition of the value of these methods, which are particularly favored by the climatic conditions of Florida, would work a wonderful reduction of the statistical figures regarding tuberculosis.

This excerpt from the *American Journal of Public Health* voices the opinion of the NOTES on :

SANITATION AND POLITICAL ECONOMY.

"Public confidence is one of the greatest assets in the modern public health movement. The public insist upon the enactment of public health legislation in spite of the fact that many features are contained therein which are of doubtful importance or value. There is reason to believe that a change is brewing and that sanitary ordinances, expenditures and improvements must be reasonable in their extent and scope before they will be accepted by the public and by the courts. As public confidence is such a valuable asset it must be jealously guarded. Enthusiasts must not be allowed to damage it by extravagant claims and promises. 'Politics mixed with sanitation makes an especially dangerous compound.' Political economy is at the present time seeking a partnership with sanitation. The danger in this is that sanitation will cover up many things which under other guises will not be tolerated.

"Mr. Ives Guiot, an eminent French political economist, has written a book on 'Where and Why Public Ownership has Failed.' He deals with the housing of the working classes in Great Britain and on the continent, on public ownership and on government control of food supplies, and his chapters on this and other matters will not fail to be of great interest to sanitarians.

"Those who like to know both sides of the subject should not fail to read this volume."

When a woman is getting the best of a man in an argument he may win out by suddenly closing her mouth with a kiss.—*Palm Beach Weekly News*.

CHEMICAL TREATMENT OF WATER.

As long as we permit cities and individuals to empty sewage and waste direct into underground streams and rivers we shall have polluted water; and ever since water was first recognized as an important carrier of disease the efforts of sanitarians have been directed toward making it safe for drinking purposes.

The last few years have brought marvelous changes in the filtration and disinfection of sewage, sewage waste and water supplies in this country. From figures given by George A. Johnson, in 1890 less than 200,000 people were supplied with filtered water; in 1900, 1,860,000; in 1911, about 8,000,000; and at the present time, more than 12,000,000. This method of protection was not wholly voluntary, but in most cases was forced by the heavy death rate from typhoid fever. In a large number of cases the outbreaks of this disease were traced directly to a polluted water supply. The introduction of filtration has reduced the typhoid fever death rate in some localities by about 60 or 70 per cent. It has also been noticed that a distinct decline in the general death rate has followed the introduction of a pure water supply.

Sedgwick and MacNutt concluded from a thorough study of the death rate statistics of Lawrence, Lowell, Albany, Watertown, Binghamton, and Hamburg, that deaths from gastro-intestinal disorders and tuberculosis are apparently diminished at the same time.

Wonderful results have been obtained from filtration, but sanitarians have not been wholly satisfied with this means of water purification, since the effluent from mechanical filters or slow sand filters, improperly operated, may contain many bacteria. They have, therefore, resorted to chemical treatment of water.

LIQUID CHLORINE.

Of all the chemicals tried so far, chlorine either as a gas or in some of its combinations seems to have proved by far the most satisfactory. Liquid chlorine has recently come into use for this purpose and it can probably be used more cheaply and with less trouble than some of the combinations. It can be purchased in tanks or cylinders just like carbonic acid gas and can be connected to the water supply into which it can be allowed to flow. There will be no waste material in connection with the use of liquid chlorine.

HYPOCHLORITE OF LIME.

Chlorine in the form of "bleaching powder" is the most common and widely used of all the chlorine preparations. This form of chlorine is sold on the market as Calcium Hypochlorite, or Bleaching Powder, and can be purchased from any one of a number of reliable firms. The product furnished by most of these firms will average about 35% to 37% available chlorine when fresh, and in properly sealed cans. If it is to be purchased in considerable quantities the main item to be considered in comparing prices is freight rates; therefore the nearest company would be the best concern from which to purchase.

An emergency hypochlorite plant consists essentially of three substantial oak barrels, a specially designed orifice box, and the necessary

valves and connections. In operating this plant a calculated amount of the calcium hypochlorite is first dissolved in one of the mixing barrels in a known amount of water for about eight to twelve hours and the solution is then drawn off into the solution barrel. This is done by gravity if circumstances permit; if lack of space renders this arrangement impossible, the mixing barrel is set on the floor and the prepared solution is pumped into the solution barrel by means of a small hand force pump. The outlet connection to the solution barrel is then opened and the solution flows into the orifice box where it is maintained at a constant level by a float valve. While the pit cock at the outlet of the orifice box opens sufficiently to permit the required rate of outflow, the solution can go direct to intake pipe of high pressure pump through a small pipe running direct from orifice box to intake pipe.

While the first barrel of the solution is being drawn off, a second charge is being dissolved in mixing barrel No. 2, and as quickly as the solution in the solution barrel is exhausted, this second charge is run into the solution barrel and another re-charge is mixed in mixing barrel No. 1, to be used in turn.

The amount of hypochlorite required by a water will depend largely upon the quality and the degree of contamination. Variations in turbidity will affect it particularly when the suspended material is rich in organic matter. Another thing which may affect the use of the hypochlorite is a high alkalinity.

Prof. Phelps, of the Massachusetts Institute of Technology, found .25 to .40 parts per million of available chlorine necessary to sterilize. This amounts to from 6 to 9.6 pounds of bleaching powder per million gallons.

Prof. Newlands, of the Connecticut State Board of Health, used one part per million, or about 24 pounds of bleaching powder per million gallons of water treated. This amount removed all *B. coli* and 99.5% of all bacteria. In using .5 parts per million, or 12 pounds per million gallons of water, he got as good results (99.5% removal).

It may be generally stated, then, that under average conditions the amount of hypochlorite necessary to effectively sterilize water for drinking purposes is one ounce to every 5,000 gallons of water.

The amount of the hypochlorite to be used should be thoroughly mixed with 20 gallons of water in the mixing barrel, as described above, and after standing from eight to twelve hours should be drawn off into the mixing barrel. Then from this barrel into the suction or intake pipe of the high pressure pump and forced to the standpipe.

SIMPLE APPLICATION OF THIS METHOD FOR HOME TREATMENT OF WATER.

For home treatment of water in small quantities, the following formula will prove useful and easy of application: To make stock solution of chloride of lime take one-half pound of chloride of lime and mix it thoroughly with one gallon of water. The bottle used should have a closely fitting glass stopper. Shake thoroughly for some time. Allow this stock solution to stand for about eight hours,

or preferably over night, in order to allow the undissolved portion to settle.

From the clear solution at the top of the bottle take two drops and place in each gallon of water to be sterilized, thoroughly mixing same by agitating the mixture with a clean paddle or stick for about three minutes. This shaking or mixing is absolutely necessary to insure complete sterilization. If the water is muddy or has been condemned, use a greater quantity, not to exceed three drops to a gallon. If the water has a taste or odor from the solution, the quantity may be reduced until such taste or odor disappears.

Do not buy a can that has stood on the shelf of the store for some time. The chloride should be in a powder and if found caked in the can it is worthless as a sterilizer. Be sure the can contains a loose powder, and insist upon having what is known as "35% Commercial Chloride." If only a portion of the can is used, the can must be closed and made air-tight by replacing the top as it was when purchased. As soon as the powder cakes or solidifies it should be thrown away as it is no longer of any value as a sterilizer.

In keeping and storing chloride of lime the factors to be guarded against are carbonic acid, moisture, heat and light. Therefore, it should be kept in closed vessels in a dry, cool place.

EFFECTS OF TREATMENT.

The action of hypochlorite on water consists primarily in an almost complete destruction of the bacterial life contained. The non-spore-bearing forms of organisms are particularly susceptible to the treatment and these are destroyed with great facility. The spore bearers are, however, somewhat more resistant and their extinction is not so readily accomplished.

Fortunately those species of bacteria which inhabit the intestines of man and domestic animals are of the non-spore-bearing class and are, therefore, quickly killed. In this way organisms which produce typhoid fever, cholera, and other intestinal diseases are destroyed.

The presence of the *Bacillus coli* in a water supply is generally accepted as an indication of fecal contamination and many experiments have been made to compare the viability of this bacillus with that of its dreaded companion, the typhoid bacillus. The evidence shows that both species are of low resistance and the elimination of one coincides with the elimination of the other. From the large number of reductions of typhoid fever epidemics by the use of hypochlorite it seems safe to say that this method of treatment of water will effectually prevent water borne epidemics of this disease, by the destruction of the bacillus.

An important question which arises in connection with the use of hypochlorite is the possibility of taste and odor in the disinfected water. Nothing has discredited the hypochlorite treatment so much as over-dosing. The idea of drinking disinfected water seems to be repugnant to most people; but of late this prejudice seems to be decreasing, for the great majority of intelligent people would rather submit to a little taste or odor, or both, than to run the risk of con-

tracting typhoid fever. If the hypochlorite is properly applied the taste is negligible, or is mainly the result of auto-suggestion.

It is not so many years ago that hundreds of people could taste alum in a treated water for the same reason. If the consumer expects to taste something in the water it is an easy matter to get into a frame of mind where the expected thing will be found. W. D. H.

EUGENIC LAWS.

The Wisconsin law requiring a clean bill of health before a marriage license is issued has recently been upheld by the Supreme Court of that State. Its legal status is thus determined. This in no way determines its practical social value. As has been said before in these columns, eugenic laws at the present time are premature. We have insufficient knowledge concerning the facts of heredity to enter into hasty legislation.

Dr. Charles B. Davenport, of the Carnegie Institute of Washington, in speaking before the Eugenics Research Association expressed the opinion that the well intentioned endeavors of legislators to force physical betterment were likely to be of more harm than good at the present time.

While it is possibly true that ultimately eugenic laws will be necessary, they will only have such value as the general moral tone of the community will permit. The acceptance of the doctrines of eugenics must become incorporated in the public conscience. The cold eugenic facts must be emotionalized and spiritualized so that they virtually become of religious force to the multitude.

There are three stages in the development of all new plans for the betterment of the human race, investigation, education, and legislation. At the present time, investigations of the problems of heredity are being made throughout the world. As rapidly as facts are acquired or indeed almost as soon as they are hinted at, they are given to the general public for the purpose of continuing the general education that is necessarily a concomitant of research work that is to be of permanent value.

We are far, far from the days of legislation. More damage can be done at the present time by the premature promulgation of needless and useless laws than can be overcome by years of propaganda.

It is time for the conservative but scientific eugenists to voice their disapproval of hasty legislation, in order to safeguard the future of eugenics, lest the public be aroused to a sense of the ridiculousness of eugenic laws, by the time when sane legislation becomes practicable.—*Medical Review of Reviews, Abst., 1914.* Copied from the Ohio State Board of Health Bulletin.

GOOD FOR MASSACHUSETTS.

ANTI-VACCINATION BILL DEFEATED IN MASSACHUSETTS.

The anti-vaccination bill introduced into the Massachusetts legislature recently, was defeated in the House on May 14th, by a vote of 133 to 53. As the measure had been approved by the Senate, by a vote of 25 to 9, its sponsors had great expectations of victory. Dr. E. H.

Bigelow led the fight in the House. He made the principal speech, and by exhibiting pictures and charts showing the effects of smallpox, convinced the members of the advantages of vaccination. The replies of the State Board of Health to the series of questions suggested by Representative Chamberlain, of Springfield, were also very effective.—*The Medical Fortnightly, Abst.*, 1914.

THE LATER THEORIES CONCERNING PELLAGRA.

By DR. HENRY HANSON,

Senior Bacteriologist of the State Board of Health.

Dr. Hanson recently attended the Pellagra Conference, which was held at Pineville, Ky., in connection with the Annual Convention of Health Officers for the State of Kentucky; and in the following article gives a brief resume of the present somewhat conflicting theories regarding this disease, with reference, especially, to the mode of transmission:

In regard to the question of pellagra and its contagiousness or communicability, we are again thrown into doubt by conflicting reports from the various investigators. My own impression, after returning from the meeting in Kentucky, was that the evidence seemed to show that pellagra was transmissible, but the exact mode of transmission was unknown.

As indicated by the review of the points brought out in Pineville, it seemed that a great many statements were made, which, if proven to be facts, would absolutely indicate that pellagra was transmissible. This review was published in the *Journal of the Florida Medical Association* in September. In the review I tried to avoid injecting any personal opinion or personal conclusion and wished simply to indicate what the trend of thought was, as brought out at the Kentucky conference.

The opinion there in regard to school children was that there is no danger in allowing the pellagrous school children to attend the school with healthy children, and yet some of the statements made would indicate that there is a certain amount of danger where there are no sanitary toilets at the school. The danger in such cases would be that of the excreta, which by some is supposed to contain the etiological factor of pellagra, whatever that is, and that this may be carried off to drinking water, or to some article consumed with the food, either by flies or some other carrier.

Dr. Johnson holds that these children are diseased and for that reason should not attend the public school, and this position is based on good logic. These children certainly should be treated and they should not be in school while they are showing definite active manifestations of the disease.

To show what can be done for school children I might cite the instance of the little girl who came into the laboratory the day I returned from Kentucky, and who was diagnosed a pellagrin at that time. This child was later taken to St. Luke's hospital where she was given the hookworm treatment and at the same time put on a general nutritious diet, and on a supportive treatment such as is given

to tuberculous patients. I saw this child on a recent visit to the hospital, and found her very much improved; in fact, there were no active manifestations of the disease when I saw her, and she had gained a great deal in weight.

To briefly state the opinions which seem to prevail at the present time, I might say the Kentucky health officials and those attending the conference there, felt that pellagra is a communicable disease, but that the mode of transmission is uncertain. They hold it probable that it is by means of the intestinal discharges.

The Thompson McFadden Commission give the following summary of their work up to date, in the *Journal of the American Medical Association*, Volume 63, No. 13, September 26th, 1914:

"1. The large active foci of pellagra in Spartanburg county were found in and near the large centers of population, and particularly in the cotton-mill villages.

"2. Children under the age of 2, adolescents for about five years following puberty and adult males in the active period of life were least frequently affected by pellagra. On the other hand, women from 20 to 44 years of age, old persons of both sexes, and children from 2 to 10 years of age, were most frequently affected.

"3. No definite connection between occupation and the occurrence of pellagra has been found, although the high pellagra morbidity in the women and children points to the home as the place in which the disease is usually contracted.

"4. In the group of incident cases most thoroughly studied, evidence of close association with a pre-existing case was disclosed in more than 80 per cent.

"5. A house to house canvass of the homes of over 5,000 people living in six endemic foci of pellagra failed to disclose any definite relation of the disease to any element of the dietary.

"6. In these six villages new cases of pellagra originated almost exclusively in a house in which a pre-existing pellagrin was living, or next door to such a house, suggesting that the disease has spread from old cases as centers.

"7. So far as we have observed, pellagra has spread most rapidly in districts where insanitary methods of sewage disposal have been in use.

"8. Additional evidence has been obtained to support the conclusion that flies of the genus *Simulium* have nothing to do with pellagra.

"9. Animal inoculations and the experimental study of intestinal bacteria have not yielded conclusive results.

"10. The studies of the blood have shown a lymphocytosis in most cases, but have not disclosed any constant abnormality characteristic of pellagra.

"11. There is no evidence of inheritance of pellagra.

"12. The immediate results of hygienic and dietetic treatment in adults have been good, but after returning to former conditions of environment, most of the cases have recurred. In children, prognosis is very much more favorable."

The attempts to transmit pellagra to monkeys, which have been conducted by Lavinder, Francis and Grimm of the United States Public Health Service, and by Lorez, Director of Wisconsin Psychopathic Institute, at Mendota, Wisconsin, have been uniformly negative. While these men conducted 103 experiments and had eight deaths among monkeys, four of the deaths were plainly due to some other cause than pellagra, and in four others, the cause of death was undetermined. One monkey showed lesions which were similar to pellagra in that they were symmetrical on both arms. However no conclusion has been drawn from this one case. It was fairly well established, however, that any one single article of diet can not be claimed as the cause of pellagra. The corn theory is entirely disposed of.

The recent reports of Goldberger, of the United States Public Health Service, however, are absolutely contradictory to the conclusions of the Thompson McFadden Commission. Goldberger makes an absolute and positive statement that pellagra is not a contagious or transmissible disease, and that it is entirely a disease due to a one-sided diet. He bases his arguments on data obtained in a general survey in institutions where pellagrous individuals are treated. His statements are to the effect that in certain wards of institutions where the diet is rather low and where there is no variation in the articles served from day to day, that the largest number of cases are found and new cases develop.

In the same institutions where patients come in contact with pellagrins sufficiently, in his judgment, to contract the disease if it were communicable, but eating at a separate table, and a more varied diet, these individuals do not develop pellagra.

He further states that when the pellagrous group is put on a more varied diet, richer, containing a greater number of proteids, that the pellagrins improve and many get well. His advice is forced feeding regardless of the existing diarrhea.

In a discussion of the treatment of pellagra by Voegtlin, of the United States Public Health Service, in the *Journal of the American Medical Association*, Volume 63, No. 13, pages 1094 to 1096, he also seems to incline to the dietary element as the cause of pellagra. His conclusions are very brief and as follows:

"1. A deficiency or absence of certain vitamins in the diet.

"2. The toxic effect of some substances, as aluminum, which occur in certain vegetable foods.

"3. A deficiency of the diet in certain amino-acids."

This is rather a lengthy discussion without coming to any definite conclusion.

With all due respect to the theories of the eminent men quoted, it certainly seems difficult to dispute the fact that pellagra occurs to a greater extent in some communities than in others, and that there is a great deal of evidence to show that one case bears a relation to other cases. Also that the sanitary conditions of a community has a definite relation to the number of cases of pellagra. Where a case occurs in a family, other cases soon appear. The presence of intestinal parasites

aggravates the course of the disease. The fact that patients improve after cleaning the intestinal tract, and after simple treatment, by forced feeding, by a greater variety in the dietary, does not necessarily show that the disease is, or is not, due to a one-sided diet. We have a parallel condition in the treatment of patients suffering with tuberculosis.

THE NON-IDENTITY OF MODERN LEPROSY AND BIBLICAL LEPROSY.

Modern and biblical leprosy have long been regarded by the public as one and the same disease, but a careful consideration of the Mosaic account of the disease, shows that there is little ground for this belief. The disease known as "isaraath" was translated as leprosy, but the translators were not medical men and did not possess the scientific information that has since accumulated. In the Mosaic account two features of the disease were constantly emphasized; one, that the lesions were under the skin, and two, that they enlarged noticeably within two weeks. Modern leprosy does not resemble this description in the least. The lesions are in the skin, and they enlarge very slowly. The Mosaic account of the disease does not agree with the description of any modern disease. The Hebrew accounts do not even imply that the disease was infectious or incurable; indeed, directions are given how to recognize a cured case. Modern leprosy should be known as lepra. It is a second cousin of tuberculosis but is much less infectious.

The confusion of biblical with modern leprosy has done much to place the leper in the same category as a social pariah, and until the public is educated to regard lepra as a disease similar to tuberculosis, the victims will continue to suffer from the misguided cruelty of the community.—*Public Health Journal of Canada, Abst., 1914.* Copied from the Ohio State Board of Health Bulletin.

The press of the State will confer a favor by copying the following which is taken from *The Dietetic and Hygienic Gazette, Abst., 1914,* on

THE NEW DISINFECTION.

"The new disinfection is founded upon a knowledge of the life history and habits of disease-producing organisms; the old was based upon no factor but ignorance. A saucer of carbolic acid in the middle of a room was considered to be sufficient to kill the germs of disease not very many years ago. When yellow fever threatened our ports great attention was paid to fomites and none to mosquitoes, the real carriers of the disease. The air is not a vehicle of infection except indirectly when it conveys the small particles of saliva from a patient's mouth. The scales of a scarlet fever patient do not convey the disease, nor is the period when these scales are given off the most important. Disinfection is not performed after measles because the disease is spread during the onset and before the diagnosis is made, while the causative organism is so short-lived that terminal disinfection is practically useless. Terminal disinfection in diphtheria, scarlet fever and

measles has been abandoned for many years in Providence, R. I., yet the number of return cases has been almost negligible.

"The germs causing disease live as a rule for only a short time after leaving the human body. They do not contaminate the air, as a rule, but only the articles with which they come in contact when enclosed in portions of human secretions and excretions. Sunlight, fresh air, and a thorough mechanical cleansing are the best disinfectants. The New York Department of Health has abandoned disinfection after cases of diphtheria, scarlet fever, measles, cerebro-spinal meningitis and poliomyelitis because of the practical absence of danger of the spread of these diseases by fomites."

Neither does the State Board of Health of Florida.

PRAYER RECOGNIZED AS A THERAPEUTIC MEASURE.

The judicial recognition of prayer as a therapeutic measure is the sum and substance of the affirmation by the Appellate Division of the New York Supreme Court of the conviction of a Christian Science healer, Willis V. Cole, who was fined by a lower court for practicing medicine without a license. The only thing insisted upon by the law is that before a person is permitted to practice any system of healing he must prove that he has been sufficiently educated to be trusted to make a diagnosis. The danger of spread of unrecognized communicable disease is so great, the public should be thankful the healers are now to be driven out of business. If in need of prayer, better consult a clergyman at once. If sick, call a doctor.—*American Medicine, 1914.*
Copied from the Ohio State Board of Health Bulletin.

HOOKWORMS IN DOGS.

THEIR RELATION TO SO-CALLED BLACK TONGUE IN DOGS.

By B. M. Bishop, M. D., Holder, Fla., and C. F. Dawson, M. D., Veterinarian, Florida State Board of Health.

That the hookworm, *Uncinaria canina*, is a common inhabitant of intestine in dogs and cats is a well-known fact. According to Dr. Stiles, *Uncinariasis* is a very common disease in dogs in Washington, D. C., and the same author states that from 25 to 40 per cent of the pups born in some parts of the United States die from hookworm disease. The parasite causes a disease known as "Typhoid" in cats.

Examination of the excrement of dogs in Jacksonville and elsewhere showed an infestation with the eggs and larvae of hookworms. The dogs which furnished the samples were, in most cases, healthy and running at large, while in two cases they were patients in a hospital and being treated for other troubles, presumably.

Recently, a dog owned by one of us died of Black Tongue and was examined, in part, in the bacteriological laboratory, Dr. Hanson, Bacteriologist, assisting in the examination. The bowel showed a heavy infestation of hookworms. The lesions produced by the worms in the bowel were the only noticeable departure from a normal condition of the body.

As this observation was considered of great importance in throwing some light upon this mysterious disease, the treatment of several similarly-affected dogs was at once instituted, upon the theory that the disease Black Tongue is an acute form of Uncinariasis. The dogs were given the thymol-salts treatment, with the result that they all recovered, showing the marked improvement noticeable in successfully treated cases in the human being. Both from a pathological and from the sportsman's standpoint, this observation is of great interest, because the disease known as Black Tongue has prevailed here for many years and no theory as to its cause that was worthy of credence has ever before been advanced.

The sportsman and dog owner have realized that this disease is the bane of canine life in Florida. It is hoped that dog owners will take up the question and have their dogs affected with Black Tongue treated for hookworms, according to the plan suggested in this article, and report the results to the State Board of Health.

It may be well to give the symptoms we have found present in what we recognize as Black Tongue.

SYMPTOMS.—The most certain method of diagnosis is the examination of the excrement for eggs and larvae, by the microscope. Those who are not equipped to make this examination may forward a small sample of freshly-voided excrement to the Veterinarian of the State Board of Health, Jacksonville, Fla., with notice of shipment. Send the excrement as passed, and not in a liquid. Repeated shipments during treatments will be necessary for determining when the dog is free of the worm.

The most prominent symptom first noticed is paleness of the tongue and other mouth parts; abnormal desire for articles that dogs do not usually eat, such as dirt, clay, manure and other filth. A cough develops. Vomiting is present. Dribbling of saliva occurs throughout the disease. It is thick and ropy, and when mixed with dirt causes a very unclean appearance of the mouth. Champing of the jaws is present, and this causes abrasions of the tongue, which becomes infected, as do the other tissues, and we then note "sore mouth," with loss of appetite and inability to swallow. The breath becomes very offensive, as do also the vomitus and excrement, which in many cases consist almost solely of blood, mucus and bile. The skin is in the condition known as "hide-bound," in severe cases. There is general weakness of the body, which manifests itself more particularly in the limbs, and this increases, along with other symptoms up to the point of death, which is usually an easy one.

The existence of skin lesions, "ground itch," is not a constant lesion in dogs or in cattle infested with hookworms. This is readily understood when one considers the comparative insensitiveness of the animal hide and of the animal foot.

TREATMENT.—This should be begun early, before the urgent symptoms have developed, if the best results are to be obtained. Hence, when the dog passes blood and mucus, the excrement should be examined for the eggs and larvae. It may, as in man, require several treatments before the worm is totally eradicated from the animal.

Our treatment has been directed to killing the worms by the use of thymol, and then expelling their dead bodies and the ova by the use of salts.

The dog is starved from seven in the morning until seven at night, at which time the first dose of thymol is given, in capsule. Two hours later, this dose is repeated, the dog being kept quiet and fasted till next morning, when a dose of salts is given. After the salts has acted, the dog may be fed anything it will eat, preferably milk, beef tea, etc. Sherry wine may be given as a stimulant, in dessert spoonful doses. The dose of thymol should not be less than 10 grains for puppies and very small dogs, nor more than 30 to 40 grains for older and larger dogs. The dose of salts will range from 1 to 4 drachms, according to size of animal. If the symptoms do not abate in a few days, four or five, repeat the above doses. Repeat, anyway, in ten days.

Should the European war continue much longer, it is probable the supply of thymol will be discontinued, as it is "made in Germany." To provide a substitute for thymol is a problem that is already being considered. This substitute is the time-honored oil of chenopodium, otherwise known as wormseed oil. It is even superior to thymol in several ways. It is less poisonous, and stands highest in the scale of anthelmintics. The coefficients of several worm destroyers are as follows, according to a government report: Eucalyptus oil, 38; naphthol, 68; thymol, 83; oil of chenopodium surpasses them all, with a coefficient of 91.

The plant from which this oil is obtained grows in great profusion in Florida, and is known under the popular name, Jerusalem oak. The expressed juice from the green leaves of the plant is in high favor amongst the colored "mammies" as a worm medicine.

The dose of the oil of chenopodium ranges from 8 to 16 drops, according to age, for people. The same dosage would apply for dogs. The dose is repeated every two hours for three doses. Two hours thereafter, a tablespoonful of castor oil with a teaspoonful of chloroform is given. The oil is best administered on sugar. If unusual depression occurs from the use of the oil, stop it, and stimulate with strong, hot coffee, given by the mouth, or injected into the rectum.

Another method of applying the remedy is to prepare a decoction by boiling one ounce of the fresh plant in a pint of milk or water, and administering this tea in wineglassful doses.

AFTER TREATMENT.—As the resulting anaemia is pronounced, this deserves notice, and a general tonic should be given. The following tonic pill is recommended. Each pill should contain the following amounts of the ingredients, according to age and size of the dog: Ferri reduct., grains 1 to 5; Strych. sulph., grains 1-100 to 1-60; Quin. sulph., grains 1 to 2; Acid. arsenosi, grains 1-30 to 1-10.

He—What's supposed to be the use of a fireless cooker?

She—It's the substitute for a cookless fire.—*The Chronicle.*

"A stenographer," said Sneerwell, "seems to be the only woman to whom a man dictates nowadays."—*Judge.*

STATISTICS.**SMALLPOX.**

Reported cases of smallpox in Florida, September, by counties (366 vaccine points distributed):

Escambia	1
Suwanee	10
Total cases smallpox, September.....	11
Total cases smallpox, January 1 to October 1, 1914.....	521

RABIES.

Report of rabies in Florida, September, by counties:

	<i>No. Persons Treated.</i>
Alachua	2
Hillsborough	2
Jefferson	1
Taylor	5
Number persons receiving Pasteur treatment, September....	10
Number persons treated, January 1 to October 1, 1914.....	82

DIPHTHERIA ANTITOXIN.

Indigent patients receiving diphtheria antitoxin through the drugists, paid for by the State Board of Health during September, by counties:

Alachua	2
Duval	13
Hillsborough	1
Volusia	1
Walton	2
Total number indigent patients.....	19

VETERINARY DEPARTMENT.**GLANDERS.**

Report of cases, by counties, September:

Duval	1
Putnam	1
Total cases, September	2
Total cases, January 1 to October 1, 1914.....	24

CATTLE TICK ERADICATION.

Cattle dipping vats constructed during September, 1914:

Nassau county (near Baldwin).....	1
Suwanee county (at Branford).....	1

Total number cattle dipping vats built, September.....	2
Total number of cattle dipping vats constructed in Florida to October 1, 1914.....	46

**REGULATIONS FOR THE IMPORTATION OF DOMESTIC ANIMALS INTO
FLORIDA.**

(In effect September 1, 1914.)

Shipments of Certified Live Stock into Florida, September, 1914:

- 14 horses from Clearmont, Wyoming, to Cocoa, Fla.
- 1 horse from Kentucky to Jacksonville, Fla.
- 1 pony from Havana, Cuba, to Key West, Fla.
- 7 horses, 2 mules from Atlanta, Ga., to Lake City, Fla.

STATISTICS—Continued.

Shipments of Certified Live Stock into Florida, September 1914—Continued.

1 cow from Valdosta, Ga., to Ft. Lauderdale, Fla.	
34 mules, 4 horses, from Atlanta, Ga., to Miami, Fla.	
3 mules, 25 horses, from Chicago, Ill., to Live Oak, Fla.	
4 horses from W. Liberty, Ill., to Delray, Fla.	
3 horses, 2 cows, from Louisville, Ky., to Orlando, Fla.	
3 mules, 3 horses, from Muscatine, Tenn., to Lakeland, Fla.	
3 horses, 5 mules, from Atlanta, Ga., to Winter Garden, Fla.	
2 mules from Kirkwood, Mo., to Vero, Fla.	
4 horses from Greenville, Tenn., to Wauchula, Fla.	
1 hog from Baton Rouge, La., to Pensacola, Fla.	
2 horses from Shelbyville, Ky., to Leesburg, Fla.	
7 horses from Atlanta, Ga., to Tampa, Fla.	
15 horses, 15 mules, from Paducah, Ky., to Titusville, Fla.	
Total number certified horses shipped into Florida, September.....	93
Total number certified mules shipped into Florida, September.....	64
Total number certified cows shipped into Florida, September.....	3
Total number certified swine shipped into Florida, September.....	1
Grand total number certified animals shipped into Florida during September, 1914	161
Shipments of Certified Live Stock from Florida, September, 1914:	
9 horses, 2 mules, Tampa, Fla., to Memphis, Tenn.	
2 mules, Jacksonville, Fla., to Oconto, Nebraska.	
40 cattle, Jacksonville, Fla., to Columbia, S. C.	
44 cattle, Jacksonville, Fla., to Columbia, S. C.	
40 cattle, Jacksonville, Fla., to Columbia, S. C.	
40 cattle, Jacksonville, Fla., to Columbia, S. C.	
34 cattle, Jacksonville, Fla., to Columbia, S. C.	
Total number certified horses shipped from Florida, September.....	9
Total number certified mules shipped from Florida, September.....	4
Total number certified cattle shipped from Florida, September.....	198
Grand total number certified animals shipped from Florida during September, 1914	211

HOG CHOLERA SERUM ADMINISTRATION, SEPTEMBER, 1914, BY COUNTIES.

County.	C. C. Serum Distributed.	Number of Hogs Serum requested for.	Total Weight of Hogs to be treated.
Alachua	15,350 c.c.	662	44,030 pounds
Bradford	17,000 c.c.	675	51,750 pounds
Calhoun	2,500 c.c.	100	7,500 pounds
Columbia	5,850 c.c.	209	15,830 pounds
DeSoto	13,750 c.c.	586	37,564 pounds
Escambia	6,250 c.c.	227	15,930 pounds
Gadsden	4,500 c.c.	160	14,500 pounds
Hamilton	12,800 c.c.	520	33,950 pounds
Hernando	6,800 c.c.	290	16,500 pounds
Hillsboro	9,600 c.c.	380	25,200 pounds
Jackson	7,150 c.c.	330	15,445 pounds
Lafayette	15,350 c.c.	695	47,780 pounds
Leon	2,600 c.c.	75	11,400 pounds
Levy	7,250 c.c.	275	21,000 pounds
Liberty	12,300 c.c.	590	33,400 pounds
Madison	8,600 c.c.	315	25,200 pounds
<i>Carried forward....</i>	147,650 c.c.	6,089 hogs.	416,979 pounds

STATISTICS—Continued.

HOG CHOLERA SERUM ADMINISTRATION, SEPTEMBER, 1914, BY COUNTIES

County.	C. C. Serum Distributed.	Number of Hogs Serum requested for.	Total Weight of Hogs to be treated.
Brought forward...	147,650 c.c.	6,089	416,979 pounds
Marion	25,150 c.c.	1,185	64,250 pounds
Orange	700 c.c.	17	2,250 pounds
Pinellas	1,850 c.c.	75	4,500 pounds
Polk	1,850 c.c.	73	4,935 pounds
Putnam	700 c.c.	24	1,230 pounds
Sumter	4,600 c.c.	130	11,700 pounds
Suwanee	13,900 c.c.	640	38,915 pounds
Taylor	4,500 c.c.	200	12,500 pounds
Volusia	600 c.c.	15	2,325 pounds
Wakulla	500 c.c.	25	1,000 pounds
Walton	400 c.c.	20	1,000 pounds
Washington	3,200 c.c.	160	7,350 pounds
Totals	205,600 c.c.	8,653 hogs.	568,934 pounds

BACTERIOLOGICAL LABORATORIES.

SPECIMEN EXAMINATION.

Specimens.	Jacksonville.	Tampa.	Pensacola.	Total.
Animal parasites	163	116	41	320
Diphtheria	335	65	51	451
Gonorrhoea	48	41	36	125
Malaria	192	181	36	409
Pathological	11	4	..	15
Rabies	7	3	..	10
Tuberculosis	114	81	25	220
Typhoid fever	197	114	49	360
Water (for sewage contamination)	20	..	..	20
Miscellaneous	36	12	12	60
Rat examinations	..	609	1,323	1,932
Totals	1,123	1,226	1,573	3,922
Grand total number specimens examined by laboratories of the State Board of Health during September, 1914.				3,922

DISTRIBUTION OF DISEASES DIAGNOSED IN SEPTEMBER.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

MALARIA

Town.	Diphtheria.	Gonorrhoea.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Alachua	1	..	..	..	..	..	..	..	..	1
Bartow	..	..	..	..	..	..	..	2	1	3
Bowling Green	..	..	..	..	..	..	..	..	2	2
Branford	1	..	..	..	..	..	..	..	..	1
Campville	..	..	..	..	..	..	..	..	1	1
Citra	..	..	..	..	..	1	1	..	..	2
Crescent City	..	..	..	..	..	..	..	1	..	1
Cocoa	..	..	..	..	..	..	..	..	1	1
Dade City	..	..	..	..	..	..	1	..	..	1
Carried forward	2	..	..	..	..	1	2	3	5	13

DISTRIBUTION OF DISEASES DIAGNOSED IN SEPTEMBER—Continued.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

—MALARIA—

Town.	Brought forward	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Daytona	1	2	..	..	..	..	1	2	3	5	13
Delray											3
Dowling Park			1					1	..		1
Fernandina									1		2
Ft. Meade								1	..		1
Ft. Myers									1		1
Gainesville	5						1	..	1		7
Green Cove Springs	..	1							..		1
Grandin									1	1	2
Greenville									..	1	1
Hampton									..	1	1
Jacksonville	27	18				4	17	14	16	96	
Jacksonville, re-lease cult.	23								..		23
S. Jacksonville	1								..		1
Jasper								1	..	1	2
Key West									1	..	1
Kissimmee									1	1	2
Lake Butler									1	2	3
Lake City		1						1	..		2
Leesburg	4								..		4
Live Oak	2						1	1	..		4
Mandarin									..	3	3
Marianna								1	..		1
Mayport	1								..		1
Miami									1	..	1
Micanopy									..	3	3
Miccosukee								3	..		3
Morrison								2	..		2
Mulberry								..	1	..	1
New Smyrna								..	1	..	1
Ocala	1							1	..		2
Orlando							1	2	1	..	4
Palatka									1	..	1
Pine Mount									1	..	1
Plant City	1							1	1	..	3
Princeton									..	1	1
Punta Gorda									1	..	1
Quincy	1							3	..		4
San Antonio								1	..		1
St. Augustine	1							..	1	1	3
Starke								1	..	1	2
Tallahassee	14						1	3	1	4	23
Tallahassee, release cult.	1						..	1	..		1
Wauchula								1	..		1
Wildwood								..	5	5	
Total	85	21	..	..	..	9	44	36	46	241	

DISTRIBUTION OF DISEASES DIAGNOSED IN SEPTEMBER—Continued.

REPORT OF TAMPA LABORATORY.

—MALARIA—

Town.

	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Tampa	24	20	5	..	3	5	9	22	14	70
West Tampa	4	..	..	..	..	..	..	..	..	4
Plant City	7	..	..	..	..	..	..	..	..	5
Frost Proof .....	..	..	..	..	..	..	..	..	..	1
Wauchula .....	..	..	..	..	..	..	..	..	..	3
Avon Park .....	..	..	..	..	..	..	..	..	..	1
Bartow .....	..	..	..	..	..	..	..	..	..	1
Fort Myers .....	..	..	..	..	..	..	..	..	..	2
Largo .....	..	..	..	..	..	..	..	..	..	3
Palmetto .....	..	..	..	..	..	..	..	..	..	1
Manatee	2	..	..	..	..	..	..	..	..	2
Lakeland .....	..	1	..	..	..	..	..	..	..	2
Bowling Green .....	..	..	..	..	..	..	..	..	..	1
Release culture	9	..	..	..	..	..	..	..	..	9
Total	24	22	5	..	3	6	9	22	14	105

REPORT OF PENSACOLA LABORATORY.

—MALARIA—

Town

	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Pensacola	3	11	..	..	..	2	6	3	8	33
Marianna	3	..	..	..	..	..	..	..	..	3
Panama City	2	..	..	..	..	..	..	..	..	2
Crestview .....	..	..	..	..	..	..	..	..	..	2
Century	4	..	..	..	..	..	..	..	..	5
Wewahitchka .....	..	..	..	..	..	..	..	..	..	2
Muscogee .....	..	..	..	..	..	..	2	..	..	2
Garniers .....	..	..	..	..	..	..	..	..	..	6
Holt .....	..	..	..	..	..	..	..	1	..	1
DeFuniak Springs .....	..	..	..	..	..	..	..	..	..	1
Total	12	11	..	..	..	2	8	4	20	57

Total cases of principal diseases diagnosed by laboratories of the State Board of Health during September:

	Diphtheria.	Gonorrhœa.	Malaria.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Central Laboratory..	61	21	9	44	36	46	217
Tampa Laboratory..	15	22	14	9	22	14	96
Pensacola Laboratory	12	11	2	8	4	20	57
Total for State.	88	54	25	61	62	80	370

VITAL STATISTICS.

Births and Deaths (exclusive of Stillbirths) in the FIRST HALF YEAR (January to June, inclusive) 1914.
 Reported to the State Board of Health of Florida by the cities of the state of 2,000 population and over.
 (Subject to correction and revision.)

Cities	Estimated Populat'n July 1, 1914	1st Quarter, Jan., Feb., Mch.						2nd Quarter, April, May, June						1st Half-Year, January—June, incl., 1914							
		Births			Deaths			Births			Deaths			Births			Birth Rate	Deaths			Death Rate
		w	c	t	w	c	t	w	c	t	w	c	t	w	c	t		w	c	t	
Jacksonville	70,173	261	211	472	152	207	359	190	187	377	130	200	330	451	398	849	24	282	407	689	20
Tampa	49,156	290	66	356	147	63	210	230	51	281	127	74	201	520	117	637	26	274	137	411	17
Pensacola	25,212	97	56	153	54	56	110	84	54	138	47	59	106	181	110	291	23	101	115	216	17
Key West	21,150	100	33	133	71	29	100	82	26	108	75	25	100	182	59	241	23	146	54	200	19
West Tampa	10,772	79	5	84	30	6	36	68	5	73	21	3	24	147	10	157	29	51	9	60	11
Gainesville	7,269	18	18	36	13	25	38	15	13	28	8	17	25	33	31	64	18	21	42	63	17
Miami	7,085																				
St. Augustine	6,013	17	2	19	11	6	17	10		10	21	9	30	27	2	29	10	32	15	47	16
Tallahassee	5,885	10	15	25	1	14	15	6	6	12	9	13	22	16	21	37	13	10	27	37	13
Lake City	5,466																				
St. Petersburg	5,213	24	13	37	43	12	55	23	10	33	17	11	28	47	23	70	27	60	23	83	32
Lakeland	4,801	28	8	36	20	6	26	28	4	32	18	4	22	56	12	68	28	38	10	48	20
Ocala	4,791	9	9	18	4	6	10	9	6	15	8	11	19	18	15	33	14	12	17	29	12
Orlando	4,496	17	11	28	28	12	40	18	9	27	24	14	38	35	20	55	24	52	26	78	35
Sanford	4,472	12	15	27	4	8	12	6	7	13	3	13	16	18	22	40	18	7	21	28	13
Live Oak	4,212	16	7	23	1	4	5														
Quincy	4,207	1	1	2	4	3	7	6		6	4	3	7	7	1	8	4	8	6	14	7
Palatka	3,981	2	7	9	11	7	18	2	2	4	6	10	16	4	9	13	7	17	17	34	17
Daytona	3,675	8	6	14	10	8	18	9	9	18	6	4	10	17	15	32	17	16	12	28	15
Fernandina	3,583	4	13	17	4	16	20	3	18	21	2	16	18	7	31	38	21	6	32	38	21
DeLand	3,393	12	4	16	7	1	8	8		8	6	2	8	20	4	24	14	13	3	16	9
Plant City	3,230	9	9	18	9	5	14	14	6	20	3	5	8	23	15	38	24	12	10	22	14
Fort Myers	3,111																				
Apalachicola	3,065	11	10	21	3	8	11	2	10	12	2	10	12	13	20	33	22	5	18	23	15
Bartow	2,950	4	3	7	4		4	12	5	17	3	1	4	16	8	24	16	7	1	8	5
Tarpon Springs	2,923	5		5	14	3	17	7	2	9	7	1	8	12	2	14	10	21	4	25	17
DeFuniak Springs	2,707	3		3	3	2	5	2		2	7	2	9	5	5	4	10	4	14	10	
Kissimmee	2,593	18	7	25	2	1	3	12	4	16	5	1	6	30	11	41	32	7	2	9	7
Marianna	2,343	8	7	15	1	10	11	5	2	7	3	3	6	13	9	22	19	4	13	17	15

VITAL STATISTICS.

JACKSONVILLE, FLA., October 22, 1914.

The first HALF YEAR tabulation of the births and deaths in the Florida Registration Cities is now issued and gives the figures for the full six months from 25 of the 29.

Miami and Fort Myers have, since the publication of the tabulation of the First Quarter, passed the Model Ordinance and collected reports which will be given in the next tabulation. Live Oak has lately passed the ordinance and resumed collections, which had ceased with the First Quarter; and Lake City has also passed an ordinance and inaugurated the work.

With the exception of Kissimmee, Marianna, Palatka and West Tampa, all of the 29 cities now require by ordinance the prompt filing of complete and accurate certificates of births and deaths and the essential requisite of the burial permit. These four cities are being urged to make their ordinances uniform with the requirements of the others and will no doubt soon do so.

POPULATION.

The figures given are the estimates for the midyear of 1914, based upon the United States Census returns of 1900 and 1910.

Several of the cities have made local censuses lately, notably Miami showing 14,392, and Marianna 2,998. These are widely variant from the 1914 estimates, but for the sake of comparison, both with each other and with cities in other states, the uniform standard of the United States Census must be used for comparable statistics. Accurate intercensal enumerations would be of great value, but until such can be had the Bureau of Census estimates will be used.

At least one of these cities, Marianna, and without doubt others, have enlarged their corporate limits since the census of 1910 and so increased their population. Without a very careful survey and computation in each case it would be impossible to include these increases in the 1914 estimates. And it should be remembered that any increases in population figures will reduce rates and in those cities where collections are under 90 per cent accurate the deficiencies in the rates shown would be accentuated.

In the next tabulation, which will include the Third Quarter, it is hoped to give the estimated proportional population of white and colored in each city, with the birth and death rates for each.

ACCURACY OF REPORTS.

Taking the minimums of 15 and 20 per 1,000 per annum for deaths and births respectively, an inspection of the birth and death rates in the present tabulation will tend to indicate the completeness of the collections in each city.

In a number these clearly show that the accuracy is below 90 per cent. Where this is the case in deaths, Registrars are warned that their work should be brought up to standard, and municipal officials and all interested in each city with rates, birth as well as death, below the

assumed minimums are urged to see their ordinances are enforced and collections made complete.

When rates are given for white and colored separately, these will show, not so much the true rates, as the probable point of the deficiencies in registration.

DEATH RATES.

The four larger cities, where the mortality records are no doubt quite accurate, each show death rates in excess of the minimum of 15. Their differences of from 17 to 20 are doubtless most largely due to their varying proportions of negroes; when published the white and colored death rates of these and other cities with equally complete registration should give an index to the health conditions and work in each.

Certain other cities show rates considerably above 20 per 1,000. This is probably caused by deaths of non-residents and until careful distinction can be made of these, those communities with large numbers of winter visitors will show to disadvantage. When the tabulation of the Third Quarter is issued, a showing of the deaths from April to September, both inclusive, will largely avoid this source of error and allow the giving of a rate of the presumably resident deaths, both white and colored.

BIRTHS.

The great variations in the birth rates, even between cities where collections are probably fairly accurate, are of interest. Low rates, below 20, without doubt indicate only that registration is incomplete, but in cities with high rates the differences can probably only be explained by varying proportions of races, white, negro and other, and their racial differences in fertility.

This matter of normal birth rates is of great interest and of utmost importance to the future of the State and the nation, and it is hoped birth registration can be made accurate in all Florida cities to allow safe conclusions to be drawn from their data.

The primary importance, however, of birth registration from a health standpoint, is its use in the fight to reduce infant mortality and sickness. All should be interested and active in helping in every way this great conservation movement.

THE SMALLER FLORIDA MUNICIPALITIES.

Much interest is being shown by the cities and towns, other than the Registration Cities, to whom the opportunity has lately been offered to collect birth and death records.

This office has already had reports that the following of those over 500 populations have passed the Model Ordinance: West Palm Beach, Fort Meade, South Jacksonville, Dade City, Sarasota, Noma and Palmetto. Also the following of those under 500: Fort Lauderdale, Lake Worth, Mount Dora, Pablo Beach and St. Cloud. There are in all probability others which have done so of which this office is not yet advised, and judging from the inquiries received a large number will pass it in the near future.

The continued success of collections in the Registration Cities and the adoption of the plan generally by the other municipalities should assure a favorable hearing when an appeal for a State law is made to the legislature, and will now give the many who have their eyes on Florida the desired information as to her health conditions.

JOSEPH Y. PORTER,
State Health Officer and Registrar of Vital Statistics.

THE IMPORTANCE OF BIRTH AND DEATH REGISTRATION TO THE PEOPLE AS A WHOLE.

"If inventory and stock taking are essential in business, so in the field of human welfare, the registration of births and deaths lies at the very foundation."
—Kingsley.

The past few years have been marked by enormous strides in science. Curative and preventive medicine have progressed rapidly and with ever-increasing accuracy. The conquests against deadly pestilential diseases have been crowned by success. The conservation of child life and the upbuilding of the race have been proven essentially practical.

HUMAN LIFE Unusual achievements have followed one upon
MAY BE the other with such rapidity that we were quite
LENGTHENED prepared to accept the remarkable assertion of Irving
 Fisher that, by the intelligent application of our
present knowledge, the average span of human life may be increased
full fifteen years.

The significant and all important fact in this assertion is that the means are now available. The prolongation of our years of happiness, productiveness and efficiency does not depend upon the speculative accomplishment of the future. It lies within reach of the application of present knowledge of prevention.

ESSENTIALS OF The prolongation of human life, however, is not
PROLONGED LIFE altogether a matter of individual conduct. It depends
 largely upon intelligent public action. It involves:
(a) The application of preventive measures in those places where preventable diseases find their harvest; (b) The conservation of the lives of children and the prevention of infant mortality; (c) The elementary and special education of the people that they may the more intelligently protect themselves; (d) The suppression of all causes of illness or accident where these things are preventable or controllable.

AN ESTABLISHED The work is not new. Its practicability has been
PART OF proven beyond cavil. The protection of the lives
GOVERNMENT and health of the people has become a basic part of
 government. Each town has its health department;
each state has its board of health; the nation its public health service,

the powers of which there is a general tendency to extend. And, in addition to these and working toward the same great end, are public health associations, organizations battling against tuberculosis, bureaus of factory inspection controlling child labor, a national children's bureau, organizations interested in school inspection, child welfare, playgrounds, sanitation, prevention of blindness, epilepsy and so on.

And all of these agencies, public and private, with the necessary knowledge, machinery and power, stand ready to push their work of staying the hand of death and of extending human life as soon as they are enabled to apply their forces and knowledge intelligently.

MUST KNOW OF But we can not intelligently battle against preventable deaths when we do not know when or where BIRTHS AND DEATHS these preventable deaths occur. We can not conserve the lives of infants if we do not know when or where infants are born.

VITAL STATISTICS Hence, we are brought face to face with the ESSENTIAL proposition that we can not attain the maximum of disease or death prevention or of health or of life conservation until we have complete registration of all births and deaths and causes of deaths.

Health officers tell us that public health work without mortality statistics is like ocean navigation without chart or compass—aimless and meandering. Agencies for the prevention of blindness can not save the eyes of infants if infants come into the world unannounced and unrecorded. Child labor can not be regulated until birth registration gives us the actual ages of children and compulsory education can only be partially successful until that time. The National Children's Bureau must remain largely inactive until births are recorded.

BUSINESS VALUE OF STATISTICS Aside from the extension of human life, the proper registration of births and deaths has much value. The recording of births is very essential in all questions of heredity, legitimacy, the age of consent, property rights and identification. Records of deaths are indispensable in determining the death rate, detection of crime, proof of death and in the determination of the duration of life.

As a matter of intelligent government, no civilized community should permit a human life to be begun unrecorded; no civilized community should permit a human being to die and be buried without official registration of when and why.—From "Birth and Death Bookkeeping."
Association of Life Insurance Presidents.

SOUTHERN HEALTH EXHIBITION.

In connection with the annual meeting of the American Public Health Association, there will be held in Jacksonville, from November 27th to December 7th, a health exhibition.

The health activities of the entire south will be represented, many state and municipal health boards and some national organizations being among the exhibitors.

This should prove of especial interest to the physicians of the state and they, as well as all others interested in the betterment of the public health, are urged to visit the exhibit.

Remember the dates—November 27 to December 7. The place, Morocco Temple.

Personal
C. O. U. B. M. II. GERT.
Gentlemen Dr. A. H.

R. R.

FLORIDA Health Notes



Bureau of Public
Health, Division of
Sanitary Reports and
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Palatka, Fla.

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HON. C. G. MEMMINGER,
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Jacksonville.

BRANCH LABORATORIES :
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LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION.

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23".
Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30".
Publication 76, Hookworms, leaflet, revised August, 1910.
Publication 77, The Housefly, Second Edition, May, 1914, pp. 11.
Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
Publication 88, Typhoid Primer, December, 1911, pp. 45.
Publication 89, Hog Cholera, January, 1912, pp. 12.
Poster 90, Smallpox Vaccination, April, 1912, 18"x24".
Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
Publication 96, Medical Inspection of Schools, June, 1912, pp. 13.
Publication 97, Lung Worms and Hog Cholera, 1912, leaflet.
Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
Publication 101, President's Letter of Transmittal, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 12.
Publication 102, Typhoid Fever in Tampa, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 24.
Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
Publication 104, Hookworm Disease, March, 1913 (Second Edition), pp. 70.
Publication 105, Malaria, April, 1913, pp. 8.
Publication 106, Mosquitoes, May, 1913, pp. 16.
Publication 107, Facts About Hog Cholera Serum and its Distribution, December, 1913, pp. 4.
Publication 108, Diphtheria, March, 1914, pp. 4.
Publication 109, Measles, March, 1914, pp. 4.
Publication 110, Scarlet Fever, March, 1914, pp. 4.
Publication 111, Smallpox, March, 1914, pp. 4.
Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
Publication 113, Hog Cholera Serum, April, 1914, pp. 8.
Publication 114, Annual Report of the Veterinary Division of the State Board of Health of Florida, 1913, Reprint from the Twenty-Fifth Annual Report of the State Board of Health of Florida, May, 1914, pp. 65.
Publication 115, Annual Report on the Treatment of Indigent Crippled Children, 1913, Reprint from Twenty-Fifth Annual Report of the State Board of Health of Florida, May, 1914, pp. 8, inserts 12.
Publication 116, Address of the Chairman of the Section of Preventive Medicine and Hygiene, Dr. Joseph Y. Porter, Southern Medical Association, Lexington, Ky., November 17-20, 1913, Printed in Southern Medical Journal February, 1914, Reprint from Twenty-Fifth Annual Report of the State Board of Health of Florida, May, 1914, pp. 15.
Publication 117, Imhoff Tanks, May, 1914, pp. 6.
Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
Publication 119, Anti-typhoid Vaccination in the Army in 1913, June, 1914, pp. 7.
Consumption Leaflet, June, 1914.
Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
Publication 121, Vital Statistics, All Florida Municipalities can have Vital Statistics, Leaflet, Reprint from Florida Health Notes, August, 1914.
Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
U. S. Public Health Service Bulletins (Limited Supply on Hand for Distribution):
Public Health Bulletin No. 48, Pellagra, September, 1911, Second Edition, pp. 42.
Reprint No. 116 from Public Health Reports, February 7, 1913, County Schools and Rural Sanitation, pp. 5.
Reprint No. 120 from Public Health Reports, October 25, 1913, Pellagra, pp. 48.
Reprint No. 150 from Public Health Reports, November 7, 1913, The Citizen and the Public Health—The Individual's Relation to the Health of the Community, pp. 8.
Reprint No. 209 from Public Health Reports, July 17, 1914, Bubonic Plague, pp. 21.
State Board of Health Notices and Circulars:
Notice of Change in Regulations Governing Distribution of Hog Cholera Serum, September 25, 1914.
Instructions to Agents Regarding the Simultaneous or Double Method Treatment for Hog Cholera, October 1, 1914.
Partial List of Nearby Plants Selling Hog Cholera Serum and Virus.
Vital Statistics—Model Ordinance and Circular Letter.
Vital Statistics—List of Florida Municipalities.
Vital Statistics—Tabulation of Reports of Florida Registration Cities for First Half Year, 1914.
Notice of Sale of Hog Cholera Serum and Virus by State Board of Health.

HOOKWORM DISEASE.

(THE USE OF OIL OF CHENOPODIUM IN ITS TREATMENT.)

Among the inconveniences entailed by the European wars is the failure of the supplies of thymol, used so largely in the southern hookworm campaign. As a substitute for this drug, now almost unobtainable, American wormseed oil (*Oleum Chenopodii U. S. P.*) has been suggested.

As indicated by the name, wormseed has long had a reputation as an anthelmintic. The plant from which the oil is distilled grows "in waste places from New England to Florida and westward to California." It has, however, been cultivated particularly in Maryland, and the oil has been known as Baltimore oil, in contradistinction to the western oil, which is no longer much of a commercial factor. While the oil is almost wholly a Maryland product, it is said that the seed is harvested in considerable quantities in Florida, where the plant is one of the most pestiferous of the weeds.

Renewed interest in the possibilities of American wormseed oil, especially against round worms, seems to date from the publications of Brüning, in 1906, who, with Gockel, Kobert, Linke, Schmitz, Thelen, and others, has investigated the pharmacology of the oil. The chemistry of oil of chenopodium has been studied in Germany by Wallach and others, and in this country by Kremers and Nelson, of the Department of Agriculture.

Clinically, its value, especially for the treatment of round worms, was well established. In 1912, Schüffner and Vervoort presented to the Fifteenth International Congress on Hygiene and Demography a paper in which they sought to demonstrate the superior advantages of oil of chenopodium in the treatment of hookworm disease as compared with other vermifuges. These authors, in the course of eight months, had given oil of chenopodium in 1,457 cases. Giving eucalyptus oil a coefficient of 38, naphthol 68, and thymol 83, oil of chenopodium surpassed them all with a coefficient of 91.

Toxicologically, a search of the Index Catalogue and the Index Medicus revealed but twelve published cases of poisoning by wormseed oil in something over fifty years, the first having been published in 1852 and the last in 1903. Of these cases eight were fatal. The report of one of the fatal cases is cited by Wood, with the added comment: "It is plain that the wormseed was not the direct immediate cause of all these symptoms or of the fatal result." All of the reported cases, however, show a certain general similarity, indicating that the toxic action is exerted particularly upon the central nervous system. Salant, in a preliminary report of his studies on the pharmacology of this oil, notes the possibility of cumulative action, indicated by the fact that nontoxic doses, when repeated in a day or two, were fatal in the rabbit. In the reported cases of poisoning the dose appears to have been excessive and, in some cases, repeated. Brüning asserts that

when properly used this remedy does not cause any unpleasant secondary actions, an experience confirmed by that of subsequent workers.

It is to be noted that oil of chenopodium is a paralysant, rather than a parasiticide. It narcotizes the parasite, which must then be got rid of by free purgation. Moreover, and here it differs radically from aspidium and thymol, it is probably best administered with castor oil. In the case of aspidium and thymol the coincident or subsequent use of any oils is to be avoided, because, their constituents being soluble in oils, they are thereby rendered more toxic to the human subject. With reference to chenopodium, which in itself appears to be constipating, the castor oil does not add to its toxicity, but offers a ready method of ridding the host both of the parasites and the drug.

Schüffner and Vervoort administered sixteen drops of oil of chenopodium with sugar every two hours for three doses. Two hours thereafter they gave a tablespoon of castor oil with a teaspoonful of chloroform. Gockel gives the single dose as 8 to 16 drops, according to age—6 to 8 years, 8 drops; 9 to 10 years, 10 drops; 11 to 16 years, 12 drops; over 16 years, 12 to 16 drops. Should untoward symptoms arise, particularly inordinate sleepiness or depression, the chenopodium should be withdrawn at once, active purgation induced, and stimulation begun with strong hot coffee by the mouth or by the rectum.

Owing to its increased vogue in continental medicine, the demand for this product has increased in the past few years. Schimmel reports that the acreage put to wormseed increased from about 90 acres in 1910 to perhaps 225 acres in 1912, while the yield rose from 2,800 pounds in the former to 6,700 pounds in the latter year. In view of the fact that October is the time of harvest and that, with the diminished or disappearing supply of thymol, the demand will probably be still further increased, every effort should be made not only to husband this year's crop to the best advantage, but to provide for a largely increased seeding next spring.

Physicians having hookworm cases under their care should give this remedy a thorough trial and report promptly their results in the medical journals. Case notes should be accompanied by information as to the sources of the oil used and, if possible, as to the method of its distillation; it has been alleged that chenopodium grown in different localities, and oils distilled by different processes, have shown varying degrees of efficacy. For use in the South, where the plant grows as a weed, the possible efficacy of a decoction, made by boiling one ounce of the fresh plant in a pint of milk or water, administered in wineglassful doses, should be remembered and tried under careful supervision. Data of this kind should aid in rehabilitating a truly American remedy, said to have been used by the Indians as a vermifuge before the landing of Columbus, and in helping the American profession to do without some of the products which, hitherto, have been almost wholly "made in Germany."—*Public Health Reports*.

THE GREATEST REWARD.

There's a man down in middle Florida (we'll call him "Mr. X.") who has just built a new home. He says he spent a lot of money to build it as nearly air-tight as possible; but he's going to work now to undo all that and let in some fresh air. This is how it happened:

Mrs. X. has consumption, and not long ago one of the District Instructors in Sanitation of the State Board of Health, in the course of her visits to sufferers from tuberculosis, called upon this family. She found all the windows tightly closed—Mrs. X. was "afraid of the cold air." Mr. and Mrs. X. and several little X.'s were living together in close personal contact in this *closed* house. In a word, they were living under the conditions *most favorable to the spread of the disease*.

Right here the instructor began a little sermon. Her subject was the great gospel of Sanitation and Disease Prevention; and her text was "Fresh Air and Plenty of It."

This sort of thing is part of the instructor's every-day work and unfortunately many of those who *listen* do not *heed*. But this particular sermon *brought results*. Mrs. X. says that hereafter the windows in that house will *stay open*.

Public health work is largely educational and the results are all too often intangible; but a ready response such as this makes us feel that our work is worth while. We are told that virtue is its own reward; that the consciousness of work well done is satisfying to the soul of the worker. This may all be true, but it is a whole lot *more* satisfying to see results.

C. H. D.

A NATIONAL HEALTH GUARD.

An army of two million, to be known as The National Health Guard, having for its object the upbuilding of a more efficient nation, physically as well as mentally, is the plan outlined in connection with an appeal "To the American People" now being issued by President E. E. Rittenhouse, of the Life Extension Institute, recently organized by prominent men, including Ex-President William H. Taft, General W. C. Gorgas, Professor Irving Fisher, Robert W. deForest, Frank A. Vanderlip, Charles H. Sabin and H. A. Ley.

No fees are required to join this new "army of national defense," according to the enlistment cards sent out from the New York headquarters at 25 West 45th Street. It aims to stimulate public interest "in every wisely designed movement to prevent life-waste and upbuild national vitality."

DUTIES AFTER ENLISTMENT.

To enlist in this newest army of defense one merely pledges "That I will, in so far as my circumstances and opportunities will permit, make an earnest effort to do these things:

1. To inform myself upon the subject of personal, community and household hygiene, and to myself obey the laws of health.
2. To encourage the practice of individuals having periodic health examinations to upbuild physical efficiency and to detect disease in time to check or cure it.

3. To give support and encouragement, and to urge my friends to do the same, to the public health service and officials who are laboring to protect the most precious asset of the nation.

4. To encourage schools, churches, social and civic bodies and employers to give as a patriotic duty all consistent help in stimulating public interest in and in spreading knowledge of the rapidly advancing science of health and life conservation.

5. To co-operate with and advise the Life Extension Institute in its purpose to reduce life-waste and to guard and strengthen the vitality and vigor of our race."

TO POPULARIZE HEALTH WORK.

"During recent years there has been an extraordinary growth of popular sentiment in favor of the conservation of health and life," says President Rittenhouse, who initiated the new organization. "The National Health Guard will give the average citizen an opportunity to give his moral support and encouragement to this health uplift movement at the cost of very slight effort and without charge or fees for membership. Every friend of the movement is urged to distribute the enlistment cards and to secure recruits. The Guard exists to teach the gospel of right living and to help check the apparent declining vigor of our race.

"The urgent need of upbuilding American vitality is especially emphasized just now by the conflict in Europe, where modern methods of warfare have made the most extraordinary demands upon the strength and endurance of both soldiers and non-combatants. This lesson is of special importance when we consider certain evidences of apparent decline in the power of our young, as well as older people to resist chronic disease.

"But whether it is declining or not, American vitality should be strengthened to meet the constant increasing life strain due to our strenuous and changing civilization. Surely, if our nation is to endure by the sword, we will need strong hands to wield it; and if we are to have a 'warless' nation, it will need a strong, virile race to sustain it.

"The 'failure of European civilization' grieves you. The sorrows and sufferings of the innocent victims of the Great War profoundly shock you. Your pity and sympathy are most worthily and generously combined with charitable relief contributions. While your mind is on this subject will you not consider the claims of the innocent victims of our own civilization? For we, too, have a long daily list of 'killed, wounded and missing.'

MEN FOR OUR FUTURE DEFENSE.

"Yesterday about 2,500 unnecessary deaths occurred—2,500 new and premature graves were filled—in the United States. A similar calamity happened today and will happen tomorrow and every day throughout the year. If these 2,500 premature deaths were scheduled to occur in a certain city or locality every day, the needless sacrifice of these lives would suddenly become a great tragedy, and the newspapers would be overflowing with heart-stirring accounts of the pend-

ing disaster. Then you would open your hearts and also your purses to any extent necessary to prevent the calamity.

"The wars of our country are fought not with trained and muscular hardened regulars, but with soft and untrained volunteers, unused to duties calling for a high order of physical endurance. They are taken from the ordinary walks of life, and it is upon the strength, vigor and physical endurance of these men that the future of our country may depend."

JUST DESERTS.

It is very encouraging to note the increasing number of requests for information about fly-proof privies. The people of our State seem to be awakening to the importance of proper means of sewage disposal.

This is one of the most essential measures in the warfare against preventable disease. Every *sanitary* privy built is another step toward the final stamping out of typhoid fever, hookworm disease and other sewage-borne diseases.

But there are still thousands who, through indifference or obstinacy, neglect this important life-saving measure. As long as there remains one open surface privy in Florida, we are *inviting* Disease and Death; not until *every one* of these disease-breeding nuisances is wiped out of existence have we any *right* to expect the reward of Happiness and Health.

C. H. D.

HUMAN HEALTH AND THE FOOT-AND-MOUTH DISEASE.

The anxiety that has been expressed in several quarters in regard to the effect upon human health of the present outbreak of the foot-and-mouth disease is regarded by Government authorities as somewhat exaggerated. The most common fear is that the milk supply might become contaminated, but in view of the precautions that the local authorities in the infected areas are very generally taking, there is comparatively little danger of this. Milk from infected farms is not permitted to be shipped at all. The only danger is, therefore, that before the disease has manifested itself some infected milk might reach the market. For this reason experts in the department recommend pasteurization. As a matter of fact, however, pasteurization is recommended by the department anyway for all milk that is not very high grade and from tuberculin-tested cows.

It has been demonstrated by experiments which have been made in Denmark and Germany that pasteurization will serve as a safeguard against contagion from the foot-and-mouth disease just as readily as it does against typhoid fever, but in any event it must be thoroughly done—the milk must be heated to 145 degrees Fahrenheit and held at this temperature for thirty minutes.

In this country the foot-and-mouth disease has been so rare that there are few recorded cases of its transmission to human beings. In 1902 a few cases were reported in New England and in 1908 in a few instances eruptions were found in the mouths of children, which were

believed to have been caused by contaminated milk. In both these outbreaks the sale of milk was stopped as soon as the disease was found among the cattle. As long therefore as the disease can be confined by rigid quarantine to certain specified areas, the danger from this source is very small. Should the pestilence spread all over this country and become as general as it has been at various times in large areas in Europe, the problem would become more serious. Under any circumstances, however, pasteurization would be an efficient remedy. Where pasteurization is not possible and where there is any reason to suspect that the disease may exist, the precaution of boiling milk might be advisable.

Cows affected with the malignant form of the disease lose practically all of their milk. In mild cases, however, the decrease may be from one-third to one-half of the usual yield. The appearance of the milk also changes. It becomes thinner, bluish, and poor in fat. When the udder is affected, the milk frequently contains coagulated fibrin and blood, so that a considerable sediment forms, while the cream is thin and of a dirty color. These changes, however, occur only when the disease is in an advanced stage, and, as a matter of fact, the disease is not permitted to pass into an advanced stage, as any stricken animal is at once slaughtered.

Men who come in contact with diseased animals may also become infected. In adult human beings the contagion causes such symptoms as sore mouths, painful swallowing, fever, and occasional eruptions on the hands, finger tips, etc. While causing considerable discomfort, however, the disease is rarely serious. Where it is very prevalent among animals, some authorities believe that it is fairly general among human beings, but that the disturbances it causes are usually so slight that they are not brought to the attention of the family physician. There is, however, a very good reason for everyone giving the diseased animals as wide a berth as possible, namely, that otherwise they may easily carry the disease to perfectly healthy herds. Federal inspectors engaged in the work of eradicating the pestilence are thoroughly equipped with rubber coats, hats, boots, and gloves, which may be completely disinfected, and others who lack this equipment are strongly urged not to allow their curiosity to induce them to become a menace to their own and their neighbor's property.

The disease, in short, is dangerous because of the loss that it occasions to property, and not because of its effects upon the health of mankind. At present all infected herds are being slaughtered as soon as they are discovered, the carcasses buried, and the premises thoroughly disinfected. Until all danger of infection has been removed in this way, the local authorities quarantine the milk.

Those who wish additional precautions are recommended to use pasteurized milk, but as has already been said, this recommendation holds true whether or not there is any fear of the foot-and-mouth disease.—*Weekly News Letter of U. S. Department of Agriculture.*

DON'T BLAME IT ON THE LORD.

All of us hate to acknowledge our mistakes—we like to shift the blame to others. But the fact remains that about forty per cent of all deaths are due to *preventable* disease—disease which is contracted nine times out of ten through our own carelessness and indifference.

Don't try to dodge the responsibility by saying that it is "God's will." Disease is not an unavoidable punishment sent upon us by an all-wise Providence—it is a natural sequence of cause and effect.

So put the blame where it belongs—on *yourself*. Don't blame it all on the Lord.

C. H. D.

THE REAL "CONSUMPTION CURE."

It is the cheapest of all remedies;
It is not patented or controlled by the trusts;
It is guaranteed not to disturb the digestion;
It is not unpleasant to the taste;
It may be procured everywhere;
It should be inhaled freely seventeen times a minute;
It is manufactured solely by God Almighty.
The name of this wonderful remedy is "FRESH AIR."

C. H. D.

It is better to be a "crank" on the subject of fresh air than to be a corpse for the lack of it.

IMPROPER USE OF HOG CHOLERA SERUM.

The following telegram, in which the name has been omitted, serves to show one instance out of many where hog-cholera serum was wasted by improper administration. The owners (prominent business men) obtained this serum free from the State Board of Health. Its cost to the Board was \$22.50. Had they paid for the serum, it would doubtless have brought them into a closer study of its proper administration, benefits, and economy of use.

"....., FLA., November 25, 1914.

"Dr. Joseph Y. Porter, Jacksonville, Fla.

"Hogs which were vaccinated with your serum thirty days ago dying with cholera. Ship us serum 1,500 c.c. by return express.

"....."

This telegram was replied to as follows:

"JACKSONVILLE, FLA., November 25, 1914.

"....., Fla.

"GENTLEMEN: Your wire stating hogs treated a month ago are now dying with cholera, is received.

"Your application of October 22 shows you had no cholera in your hogs at that time, and this is the reason they are now affected with

cholera, as the serum only protects hogs for three weeks, when there is no infection in the drove. All this is explained in our literature sent out in each shipment. *The serum should not have been applied until you had reason to believe cholera existed.* You then would have received the full benefit of its use.

"As you have been supplied with 1,000 c.c., we can not supply you further with free serum for a year.

"Enclosed you will find a circular which explains that this Board has arranged to supply, at cost, serum for those who require more than the allowance of 1,000 c.c. (about a quart).

"Yours very truly,

"(Signed) JOSEPH Y. PORTER,

"*State Health Officer.*"

NOTICE REGARDING SALE OF HOG CHOLERA SERUM AND VIRUS.

Attention is directed to the fact that the State Board of Health has deemed it advisable to limit the amount of hog-cholera serum an applicant may receive free from the State, to 1,000 c.c. (about a quart).

Realizing there are farmers who will require more than 1,000 c.c. (or a quart) of the serum, the maximum amount an applicant may receive free, arrangements have been made whereby owners can obtain, through this Board hog-cholera serum and virus, without limit, at cost price as given below. Serum and virus will be furnished only in the sizes stated in price list.

The syringes, thermometer and disinfectant may also be ordered through this office, at cost price, as given in schedule of prices following:

PRICE LIST.

50 c.c. bottles of serum (at 1c per c.c.)	\$.50
100 c.c. bottles of serum (at 1c per c.c.)	1.00
250 c.c. bottles of serum (at 1c per c.c.)	2.50
500 c.c. bottles of serum (at 1c per c.c.)	5.00
50 c.c. bottles of virus .....	.50
8-ounce bottles of disinfectant (undiluted) .....	.25
Syringe, 30 c.c., for injecting serum.....	4.50
Syringe, 8 c.c., for injecting virus.....	3.25
Thermometer, for use in "double method"	1.00

Orders for any one or all the above items may be entered, by letter or in person, in any quantity, cash with order. Postoffice or express money orders or cashier's checks are acceptable. Personal checks will not be accepted in payment. Make all remittances payable to Dr. Joseph Y. Porter, State Health Officer. All orders will be sent at purchaser's risk. None of the items is returnable.

In order that the owner may calculate the amount of serum required for a given number of hogs, the dosage with and without virus is given:

DOSAGE WITH SERUM ONLY (SINGLE TREATMENT).

To each	5 to 15 pound pig give	10 c.c. serum
To each	15 to 25 pound pig give	15 c.c. serum
To each	25 to 50 pound pig give	20 c.c. serum
To each	50 to 75 pound shoat give	25 c.c. serum
To each	75 to 100 pound shoat give	30 c.c. serum
To each	100 to 125 pound hog give	35 c.c. serum
To each	125 to 150 pound hog give	40 c.c. serum
To each	150 to 200 pound hog give	45 c.c. serum
To each	200 to 250 pound hog give	50 c.c. serum
To all hogs over 250 pounds give		60 c.c. serum

DOSAGE WITH SERUM AND VIRUS (DOUBLE TREATMENT).

To each suckling pig	20 c.c. serum and $\frac{1}{2}$ c.c. virus
To each shoat weighing 25 to 50 pounds....	25 c.c. serum and $\frac{3}{4}$ c.c. virus
To each shoat weighing 50 to 75 pounds....	30 c.c. serum and 1 c.c. virus
To each hog weighing 75 to 100 pounds....	35 c.c. serum and 1 c.c. virus
To each hog weighing 100 to 125 pounds....	40 c.c. serum and $1\frac{1}{2}$ c.c. virus
To each hog weighing 125 to 150 pounds....	50 c.c. serum and $1\frac{1}{2}$ c.c. virus
To each hog weighing 150 to 200 pounds....	60 c.c. serum and $1\frac{1}{4}$ c.c. virus
To each hog weighing 200 to 250 pounds....	70 c.c. serum and 2 c.c. virus
10 c.c. for each 50 pounds weight, maximum dosage 90 c.c.	

PRECAUTIONS AGAINST DISEASE IMPORTATION
IN ANIMALS.

The following correspondence will be of interest as regards regulations imposed by the State Board of Health governing the importation of domestic animals into Florida:

"GREENFIELD, OHIO, November 23, 1914.

"State Board of Health, Jacksonville, Fla.

"DEAR SIRS: We have several ponies to be shipped into Florida during the next few weeks. Before sending them we want to know if there is an embargo against the shipment of horses, or ponies into your State.

"We will accompany the pony with a certificate of a veterinary giving the pony a clean bill of health. The crate will be disinfected and every regulation of the United States Government complied with.

"We want to be absolutely sure, however, before making shipment, that everything is all right.

"Yours very truly,

"....."

"JACKSONVILLE, FLA., November 24, 1914.

"....., Greenfield, Ohio.

"GENTLEMEN: Your letter relative to the shipment of ponies from Ohio into Florida, is received.

"Enclosed you will find a copy of the Florida Regulations which require that all horses and mules shipped into Florida must be tested for glanders by the State Veterinarian of the State in which the shipment originates. There must also be issued by the veterinarian or one of his deputies a 'bill of health' stating the animals are free from

symptoms of all contagious diseases. You will also note that all cattle over six months of age must be similarly tested for tuberculosis, and be accompanied with a bill of health.

"Owing to the present outbreak of 'foot-and-mouth disease,' these animals must also be certified as coming from premises free from that disease, and in disinfected cars.

"When these requirements are complied with, the animals may come here without being held in quarantine.

"Yours very truly,

"(Signed) JOSEPH Y. PORTER,

"State Health Officer."

FEDERAL REGULATIONS FOR PREVENTING SPREAD OF FOOT-AND-MOUTH DISEASE BY HOG CHOLERA SERUM.

1. The regulations of the United States Department of Agriculture to prevent the spread of foot-and-mouth disease in cattle, sheep, other ruminants, and swine absolutely prohibit the movement of these classes of live stock from each of the following States: Delaware, Illinois, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Michigan, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Wisconsin.

2. In order to prevent the dissemination of foot-and-mouth disease through biological products, intended for use in the treatment of domestic animals, the following precautions should be taken at all establishments holding a license from the secretary of agriculture under the provisions of the act governing the preparation, shipment, etc., of viruses, serums, toxins, and analogous products intended for use in the treatment of domestic animals.

3. Establishments located in States quarantined on account of foot-and-mouth disease.

No new stock of any kind should be brought on the premises of the establishment after the receipt of these instructions until further orders. The live stock on hand should be carefully inspected for foot-and-mouth disease, and all pens, chutes, runways, yards, and buildings in which animals are housed or handled should be disinfected as provided for below. If in any case symptoms indicating the presence of foot-and-mouth disease are observed all operations should be suspended, the plant quarantined, and the Chief of the Bureau of Animal Industry in Washington notified at once by wire.

No serum or virus prepared or bottled subsequent to October 1, 1914, should be shipped out from the plant until these instructions are modified by further orders.

4. Establishments located in States not quarantined for foot-and-mouth disease.

New stock should be admitted to the premises of the establishment only when originating on farms outside of the quarantined areas (see paragraph 1), and on farms certified to be free of foot-and-mouth disease by a reputable veterinarian. All incoming stock should be care-

fully inspected in pens set aside for that purpose at the establishment and should be used for the production of serums, viruses, etc., only after being found to be free from any indication of foot-and-mouth disease by the inspector at the plant. As a precautionary measure, all pens, chutes, runways, yards, buildings, etc., used for live stock of any kind should be thoroughly disinfected and a careful quarantine of the premises of the establishment should be maintained by the owners. All serum test pigs, and pigs used for the production of virus, should be carefully examined by the inspector for indications of foot-and-mouth disease. No virus for simultaneous inoculation should be shipped out from the plant unless it contains 1 per cent of carbolic acid by volume, that is 4 parts to 1 part of 5 per cent carbolic acid solution, and such carbolized virus should be held in the establishment forty-eight hours before shipment. All serum must contain one-half per cent carbolic acid.

5. Disinfectants permitted to be used under the regulations to prevent the spread of foot-and-mouth disease.

1.—Mercuric chlorid. Use solution 1 to 500 for feet of horses, and solution 1 to 1,000 for harness, saddles, wagons, blankets, etc. Also permitted for hides.

2.—Forty per cent formaldehyde solution. Use 1 quart to 5 gallons of water for surfaces of buildings, yards, pens, alleys, cars, leather goods, garments, blankets, etc.

3.—Formaldehyde gas, for hay, straw, sheep skins with wool on, wool, hair, garments, etc. May also be used for interior of tight buildings. Use 20 ounces potassium permanganate for each 1,000 cubic feet of air space to be disinfected.

4.—Compound solution cresol (U. S. P.). Use 3 per cent solution in water, for cars, pens, buildings, yards, hides, garments.

5.—Substitutes for compound solution cresol. These must contain not less than 50 per cent actual cresylic acid, and sufficient soap to render the cresol completely soluble. Use in 3 per cent strength and for purposes named under compound cresol solution. The following named substitutes are now permitted: Special cresol compound prepared by the Barrett Manufacturing Co., Frankford, Philadelphia, Pa. Cooper's Fluid Dip (prepared by Wm. Cooper & Nephews, Chicago, Ill.).

6.—Chlorid of lime (U. S. P. strength, 30 per cent available chlorine). Use 1 pound to 3 gallons of water. Mix 1 pound thoroughly and uniformly with about a quart of water, then dilute it to a total of 3 gallons. For surfaces of buildings, yards, pens, alleys, cars, etc.

7.—Crystal carbolic acid. Use 5 per cent solution, for same purposes as formaldehyde solution and chlorid of lime, also hides.

6. Symptoms of foot-and-mouth disease in hogs.

The first symptom of foot-and-mouth disease in hogs is, rise in temperature, running from 105 to 108. This occurs during the incubative stage and is of short duration in hogs. The vesicles which are characteristic of the disease appear usually first on the feet between the toes and at the junction of the hair and the hoof. Vesicles may be found

on the tip of the snout, also in the mouth, and on the head. The vesicles persist for only a short time; they soon burst and leave behind a moist eroded area, the erosions healing quickly by proliferation of the epidermis. Previous to healing, these erosions are recognizable by sharply marked limits between the sound tissue and the eroded area. The erosions on the feet of hogs are characterized by a tendency to hemorrhages; sloughing off of the hoofs as a result of the disease is not unusual. The objective symptoms in hogs consist chiefly in lameness and in general sluggishness.

STATISTICS.

SMALLPOX.

Jan!
Reported cases of smallpox in Florida, October, by counties (320 vaccine points distributed):

Gadsden	1
Hillsborough	4
Total cases smallpox, October	5
Total cases smallpox, January 1 to November 1, 1914	526

RABIES.

Report of rabies in Florida, October, by counties:

	No. Persons Treated.
Alachua	1
Hillsborough	1
Lafayette	1
Number persons receiving Pasteur treatment, October	3
Number persons treated, January 1 to November 1, 1914	85

DIPHTHERIA ANTITOXIN.

Indigent patients receiving diphtheria antitoxin through the drugists, paid for by the State Board of Health during October, by counties:

Duval	2
Escambia	3
Putnam	2
Total number indigent patients	7

VETERINARY DEPARTMENT.

GLANDERS.

No cases of glanders diagnosed during October.

Total number cases January 1 to November 1, 1914

24

CATTLE TICK ERADICATION.

No dipping vats were reported constructed during October.

Total number dipping vats constructed in Florida to November 1, 1914

46

REGULATIONS FOR THE IMPORTATION OF DOMESTIC ANIMALS INTO FLORIDA.

SHIPMENTS OF CERTIFIED LIVE STOCK INTO FLORIDA, OCTOBER, 1914:

Oct. 3, Atlanta, Ga., to Lake City, Fla.....	19 horses, 6 mules
Oct. 3, Glasgow, Mont., to Jacksonville.....	61 horses
Oct. 4, St. Paul, Neb., to Kissimmee.....	10 horses, 17 mules

STATISTICS—Continued.

Shipments of Certified Live Stock into Florida, October, 1914—Continued.

Oct. 4, Paducah, Ky., to Titusville.....	15 horses, 15 mules
Oct. 8, Grand Island, Neb., to Tampa.....	24 horses
Oct. 8, Atlanta, Ga., to Eustis.....	23 horses
Oct. 9, Atlanta, Ga., to Palatka.....	14 horses, 12 mules
Oct. 9, Atlanta, Ga., to St. Augustine.....	16 horses, 18 mules
Oct. 10, St. Louis, Mo., to Miami.....	3 horses
Oct. 10, St. Louis, Mo., to Miami.....	31 cows
Oct. 11, Brookville, Ind., to Narcoossee.....	2 horses
Oct. 12, St. Louis, Mo., to Ft. Lauderdale.....	4 horses
Oct. 12, Pewaukee, Wis., to Delray.....	3 horses
Oct. 13, Atlanta, Ga., to Miami.....	12 mules
Oct. 13, Chicago, Ill., to Tampa.....	20 horses
Oct. 14, Chicago, Ill., to Lakeland.....	7 horses, 13 mules
Oct. 14, Chicago, Ill., to Live Oak.....	27 horses
Oct. 14, Porterdale, Ga., to Green Cove Springs.....	2 bulls
Oct. 14, Wauben, Ga., to Evington.....	2 cattle
Oct. 15, Nedge, Tenn., to Terra Ceia.....	2 mules
Oct. 17, Chicago, Ill., to Live Oak.....	17 horses, 6 mules
Oct. 18, DeLand, Ill., to Live Oak.....	4 mules
Oct. 18, Crookston, Neb., to Winterhaven.....	22 horses
Oct. 18, Hillsborough, Kans., to Fellsmere.....	2 cows,
Oct. 21, Atlanta, Ga., to Lake City.....	13 horses, 9 mules
Oct. 21, Woodlake, Neb., to Ft. Meade.....	12 horses, 3 mules
Oct. 21, Huntington, W. Va., to Huntington.....	3 horses, 1 mule
Oct. 22, Huntington, W. Va., to Huntington.....	3 cows
Oct. 23, Huntington, W. Va., to Jacksonville.....	2 horses
Oct. 23, Woodberry Heights, N. J., to Harwood.....	1 horse
Oct. 24, Atlanta, Ga., to Ft. Pierce.....	1 horse
Oct. 26, Oakdale, Tenn., to Zolfo.....	16 horses, 12 mules
Oct. 27, Paducah, Ky., to Florida.....	2 horses
Oct. 27, Troy, Pa., to Littleriver.....	2 horses
Oct. 28, Ludlow, Ky., to Miami.....	1 horse
Oct. 28, Atlanta, Ga., to Miami.....	2 horses, 16 mules
Oct. 29, Havana, Cuba, to Tampa.....	4 horses
Oct. 30, Atlanta, Ga., to Jacksonville.....	6 horses, 19 mules
Oct. 30, Ramsey, Ind., to St. Cloud.....	2 horses
Oct. 30, Leesburg, Mo., to Lake Worth.....	1 cow, 3 mules
Total, 357 horses, 173 mules, 37 cows, 2 bulls, 2 cattle.....	571
Total number of shipments.....	40

SHIPMENTS OF CERTIFIED LIVE STOCK FROM FLORIDA, OCTOBER, 1914:

October 13, Branford, Fla., to Charleston, S. C.....	109 cattle
October 20, Jacksonville, Fla., to Columbia, S. C.....	39 cattle
October 21, Tampa, Fla., to Danville, Ky.....	1 horse
October 30, Jacksonville, Fla., to Columbia, S. C.....	40 cattle
October 30, Jacksonville, Fla., to Blythewood, S. C.....	41 cattle
Total, 229 cattle, 1 horse.....	230
Total number of shipments.....	5

STATISTICS—Continued.

HOG CHOLERA SERUM ADMINISTRATION, OCTOBER, 1914, BY COUNTIES.

County.	C. C. Serum Distributed.	Estimated Number of Hogs to be Treated.	Estimated Weight of Hogs to be Treated.
Alachua	33,850 c.c.	1,410	92,755 pounds
Bradford	17,850 c.c.	744	48,945 pounds
Citrus	450 c.c.	20	1,225 pounds
Clay	1,000 c.c.	44	2,800 pounds
Columbia	3,150 c.c.	140	8,820 pounds
DeSoto	9,650 c.c.	405	27,012 pounds
Duval	5,400 c.c.	225	15,111 pounds
Escambia	5,400 c.c.	225	15,100 pounds
Gadsden	9,000 c.c.	380	25,175 pounds
Hamilton	9,000 c.c.	380	25,140 pounds
Hernando	17,100 c.c.	749	46,855 pounds
Hillsboro	1,750 c.c.	78	4,900 pounds
Jackson	9,150 c.c.	386	25,620 pounds
Jefferson	4,250 c.c.	180	11,877 pounds
Lafayette	15,100 c.c.	628	41,229 pounds
Leon	1,000 c.c.	45	2,785 pounds
Levy	8,900 c.c.	375	24,920 pounds
Liberty	9,650 c.c.	377	27,015 pounds
Madison	4,000 c.c.	170	11,165 pounds
Marion	25,300 c.c.	1,043	70,840 pounds
Osceola	1,700 c.c.	70	4,730 pounds
Pasco	1,350 c.c.	56	2,750 pounds
Polk	4,300 c.c.	178	12,040 pounds
Putnam	350 c.c.	18	925 pounds
St. Lucie	500 c.c.	22	1,375 pounds
Sumter	8,700 c.c.	362	24,125 pounds
Sewanee	13,900 c.c.	577	38,920 pounds
Taylor	1,000 c.c.	44	2,800 pounds
Washington	2,950 c.c.	126	8,260 pounds
Totals	225,700 c.c.	9,457 hogs	625,214 pounds
Number of applicants requesting serum, October			265
Cost of hog cholera serum purchased during October		\$3,643.54	
Total cost of hog cholera serum purchased, January 1 to November 1, 1914			\$19,635.88

BACTERIOLOGICAL LABORATORIES.

SPECIMEN EXAMINATION.

Specimens.	Jacksonville.	Tampa.	Pensacola.	Total.
Animal parasites	190	120	34	344
Diphtheria	714	195	95	1,004
Gonorrhoea	54	47	29	130
Malaria	173	188	45	406
Pathological	13	5	2	20
Rabies	2	1	..	3
Tuberculosis	141	83	21	245
Typhoid Fever	144	136	33	313
Water (for sewage contamination)	21	7	..	28
Miscellaneous	43	12	40	95
Rat examinations	..	670	481	1,151
Totals	1,495	1,464	780	3,739
Grand total number of specimens examined by laboratories of the State Board of Health during October, 1914				3,739

DISTRIBUTION OF DISEASES DIAGNOSED IN OCTOBER.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

MALARIA

Town.	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Terian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Bartow	2
Bradenton	1
Brooksville	1
Campville	1	..	..	..	..	..	..	..	..	1
Center Hill	2
Chattahoochee	1
Cocoa	1
Dade City	1
Daytona	1	..	..	..	..	..	..	..	..	3
Eugene	1
Ft. Meade	3
Ft. Pierce	3
Gainesville	5	1	..	..	..	..	..	..	..	6
" release cult.	3	..	..	..	..	..	..	..	..	3
Green Cove Springs	1	..	..	..	..	..	..	..	1
Greenville	2
Gretna	2
Hawthorn	1
Hilliard	1
Holder	2
Inverness	1
Jacksonville	31	20	..	..	..	..	9	15	..	79
" release cult.	8	..	..	..	..	..	..	..	..	8
South Jacksonville..	1	..	..	..	..	..	..	..	..	2
Jasper	2	..	..	..	..	1	..	..	..	10
Lady Lake	1
Lake Butler	2
Lakeland	2	..	..	..	..	..	..	..	3
Largo	1	..	..	..	..	..	..	..	1
Leesburg	1
Live Oak	2
Mandarin	6
Mayo	2
Miami	1
Micanopy	2
Melrose	1
New Smyrna	1
O'Brien	2
Ocala	2	..	..	..	..	..	..	..	..	5
Orlando	1	..	..	..	..	..	..	..	4
Palatka	3
Panama City	2
Plant City	1	..	..	..	..	..	..	..	2
Princeton	2
St. Augustine	1	..	..	..	..	..	..	..	1
San Antonio	1
Sanford	1	..	..	..	..	..	..	3
Standard	1
Starke	2
Sutherland	1
<i>Carried forward</i>	55	27	1	..	1	2	30	26	49	191

DISTRIBUTION OF DISEASES DIAGNOSED IN OCTOBER—Continued.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.

—MALARIA—

<i>Town.</i>	<i>Diphtheria.</i>	<i>Gonorrhœa.</i>	<i>Estivo-autumnal.</i>	<i>Quartan.</i>	<i>Tertian.</i>	<i>Species not Determined.</i>	<i>Typhoid.</i>	<i>Tuberculosis.</i>	<i>Uncinaria.</i>	<i>Total.</i>
<i>Brought forward</i>	55									
Tallahassee	9	27								191
" release cult.	2									11
Titusville		1								2
Wauchula			1							1
Welaka				1						3
West Palm Beach					1					4
Williston						2				2
Wildwood							1			8
Winter Haven								1		2
Without Data	1							1		2
<i>Total</i>	67	28	2	1	12	33	32	62		227

REPORT OF TAMPA LABORATORY.

MALARIA

<i>Town.</i>	<i>Diphtheria.</i>	<i>Gonorrhœa.</i>	<i>Estivo-autumnal.</i>	<i>Quarantine.</i>	<i>Species not Determined.</i>	<i>Typhoid.</i>	<i>Tuberculosis.</i>	<i>Uncinaria.</i>	<i>Total.</i>
Tampa	23	16	1	1	1	1	1	1	69
Manatee	2	1	1	1	1	1	1	1	5
Lakeland	1	1	1	1	1	1	1	1	2
Plant City	3	1	1	1	1	1	1	1	4
St. Petersburg	1	1	1	1	1	1	1	1	9
Largo	1	1	1	1	1	1	1	1	4
Mulberry	1	1	1	1	1	1	1	1	1
Wauchula	1	1	1	1	1	1	1	1	3
Brooksville	1	1	1	1	1	1	1	1	1
Port Tampa	1	1	1	1	1	1	1	1	1
Inverness	1	1	1	1	1	1	1	1	1
Bowling Green	1	1	1	1	1	1	1	1	1
Release culture	23	18	18	16	16	18	14	14	124
Total	52	18	18	16	16	18	14	14	124

DISTRIBUTION OF DISEASES DIAGNOSED IN OCTOBER—Continued.

REPORT OF PENSACOLA LABORATORY.

—MALARIA—

Town	Diphtheria.	Gonorrhœa.	Estivo-autumnal.	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis	Uncinaria.	Total.
Bagdad .....	..	..	..	..	..	..	..	2	..	2
Century	7	..	..	..	..	..	..	..	..	7
DeFuniak Springs..	1	..	..	..	..	..	..	..	2	3
Garniers .....	..	..	..	..	..	..	..	..	1	1
Lynn Haven .....	..	..	..	..	..	..	..	..	1	1
Marianna	2	..	..	..	..	..	..	1	..	3
Millville	1	..	..	..	..	..	..	..	..	1
Milton	3	1	..	..	..	..	..	..	..	4
Muscogee .....	..	..	1	..	..	..	1	..	..	2
Panama City .....	..	..	..	..	..	..	..	..	3	3
Pensacola	4	8	1	..	..	2	3	4	4	26
St. Andrews .....	..	..	..	..	..	..	..	..	1	1
Total	18	9	2	..	..	2	4	7	12	54

Total cases of principal diseases diagnosed by laboratories of the State Board of Health during October:

	Diphtheria.	Gonorrhœa.	Malaria.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Central Laboratory..	54	28	5	33	32	62	214
Tampa Laboratory...	29	18	6	16	18	14	101
Pensacola Laboratory	18	9	4	4	7	12	54
	101	55	15	53	57	88	369

VITAL STATISTICS.

THE MODEL STATE LAW FOR FLORIDA MUNICIPALITIES.

Announcement has just been made before the Florida State Federation of Women's Clubs at Lakeland that if sufficient interest is shown, an appeal will be made to the next legislature for new or amended legislation for the registration of births and deaths in uniformity with other states having the Model State Law.

CITY AND TOWN RECORDS.

It is thought that such a statute should provide, at first for the collection of statistics in cities and towns of either 500 or 1,000 population and over, to be extended thereafter to all incorporated municipalities, and finally, to the rural portions of the State.

COMPLETE COUNTY RECORDS.

To allow any county to have complete statistics in advance of state-wide registration, it is possible some provision may be worked out and included in the proposed bill for collecting all its birth and death records, rural as well as urban, upon sufficient interest shown and a proper request from such county.

PREREQUISITES FOR THIS LEGISLATION.

Before the legislature should be asked to grant such a Model State Law for registration of births and deaths, the large majority of Florida municipalities, at least of the larger ones, should show their interest and desire by adopting the Model Ordinance and inaugurating the system of registering the births and deaths of their own citizens. And the present Registration Cities, those of 2,000 population and over, should show their appreciation of the opportunities already afforded them for comparative showings of healthfulness by complete and prompt reports, under the best possible ordinances.

UNIVERSAL APPROVAL NEEDED.

When the legislature next meets, the sentiment of the State should be shown to be so strongly in favor of such a statute by the councils' actions in cities and towns that there should be no doubt of the passage of the proposed statute.

Let Florida be up and doing, and be in line with Georgia and South Carolina, both of which have this year passed statewide laws and are about to put them into operation.

THE BIRTH CERTIFICATE AS A LIFE-SAVER.

The following letter and article have just been received at this office; no comment is needed, except to urge all citizens of Florida municipalities to read and heed:

"SANFORD, FLORIDA
"DEPARTMENT OF HEALTH
"EXECUTIVE OFFICE.

"Dr. J. Y. Porter,
"State Health Officer,
"Jacksonville, Fla.

"NOVEMBER 19, 1914.

"DEAR DOCTOR—Please note attached clipping from the *Tampa Tribune*, which I believe should be published in the Public Health Notes (sic. HEALTH NOTES). It certainly shows the extreme necessity of vital statistics.
Yours very truly,

"OLIVER J. MILLER, M. D.,
"City Health Officer.

"HIS LIFE DEPENDS ON PROVING BIRTHPLACE.

"American in London in Danger of Being Shot as a Spy If He Cannot Satisfy Authorities.

"NEW YORK, November 17.—In an effort to save the life of Joseph Ullman, a wealthy furrier under sentence of death in London as a Ger-

man spy, attempts were made to find his birth certificate by means of which his American citizenship might be established. Records show no entry, however. Steps were then taken to find the death of his mother, who died at Ullman's birth, and two citizens who knew Ullman's parents. It is feared, however, that Ullman's citizenship can not be proven and that he must die. British authorities have given Ullman two weeks to prove his American citizenship, it is said. If it can not be established that he was a native of this city, the State Department, it is said, will take steps in his behalf.

"Joseph Ullman, his friends say, is head of the firm of that name with offices in New York, London, Paris and St. Paul. Early this year he went to London to build up the business of the firm in London, but since the war broke out nothing has been heard until a brother in this city heard of his predicament."

PROGRESS OF MODEL ORDINANCE FOR VITAL STATISTICS.

To the time of writing this office has notice that the following Florida municipalities, other than the Registration Cities, have passed the Model Ordinance for vital statistics:

Callahan.	Lake Worth.	St. Andrews.
Clearwater.	Lawtey.	St. Cloud.
Dade City.	Mount Dora.	Sarasota.
Fort Lauderdale.	Noma.	South Jacksonville.
Fort Meade.	Pablo Beach.	Stuart.
Hosford.	Palmetto.	West Palm Beach.
Lake Helen.	Panama City.	

Many others are expected to pass it in the near future; among them are:

Arcadia.	Citra.	Mulberry.
Bradentown.	Cocoa.	Port Tampa City.

The following are known to be interested and considering its passage:

Bushnell.	Green Cove Springs.	Mayport.
Campbellton.	Gulfport.	Milton.
Dunedin.	Hilliard.	Pass-a-grille.
Graceville.		Tavares.

(Two of those mentioned, Stuart and Gulfport, were not included in the Preliminary List of Florida Municipalities lately issued by this office, no knowledge of their incorporation being then known. No doubt there are other towns, mostly incorporated under the general statutes since 1910, of which nothing is known here and regarding which information is greatly desired.)

The above lists probably comprise but a minor part of the communities now interested in vital statistics and considering the inauguration of the system, and day by day, reports will be received, telling of their taking steps to perpetuate the histories of their people and record local sanitary conditions.

In the exhibit of the State Board of Health at the Southern Health Exhibition to be held in Jacksonville November 27 to December 7, it is purposed to show a large map of the State with the 29 present registration cities and such of the 170 or so other municipalities as have passed the Model Ordinance. This map will be kept up to date from day to day as new reports are received and when the exhibit travels through the State it will let the people of each locality *see* what the cities and towns are doing in this regard.

A trip just taken into Manatee and Pinellas counties has given personal knowledge of the interest the plans for eventual state-wide vital statistics has aroused. Both of these counties give promise that all of their municipalities will soon pass the suggested ordinance, and strongly suggest the possibility of complete statistics in certain counties, rural as well as municipal, in advance of state-wide registration.

To simplify, make uniform and assist the collecting of accurate death reports, this office is about to send out to all municipalities with ordinances, books of Burial or Removal Permits. A strict enforcement of this necessary check on death reporting and the refusal to allow any body to be buried, removed or to have a transit permit, without the filing of a satisfactory and properly executed certificate of death should give almost absolutely complete mortality records in municipalities.

As communities awaken to the need of Infant Welfare work, each will see that births are completely reported, and public sentiment and strict enforcement of ordinances will make these records as accurate as those of deaths.

MORBIDITY REPORTS IN OHIO.

The State Board of Health at its last meeting made an important change in the status of morbidity reports in Ohio. A marked increase was made in the number of diseases to be reported by physicians to local health departments and by local health departments to the State Health Department. Furthermore, a change in the plan of reporting diseases is now under consideration whereby the State Department of Health will place in the hands of every licensed physician in Ohio a booklet containing blank forms on which reports are to be made. The details of the proposed change in method will be outlined in a future bulletin when due consideration has been given the matter in all its ramifications. The changes in the method of reporting and the augmentation of the number of reportable diseases are part of a general plan to standardize morbidity reports in Ohio, and in the United States, and to render the valuable statistics derived therefrom subject to accurate comparison and of increased benefit to public health administrators everywhere.

VALUE OF MORBIDITY REPORTS TO HEALTH OFFICIALS.

It is a trite saying that upon the accuracy and completeness of morbidity reports depends the efficiency of any health organization. It is also true that upon the accuracy of the statistics of surrounding

health units and subdivisions will depend the success of any health department, in combatting the spread of disease. Disease does not respect corporate limits and boundary lines. Health organizations, unfortunately, have to adhere to such limitations. So any system which brings about a closer co-operation between public health officials will be a step toward rendering our control over the ravages of preventable disease more rigid. In a paper reprinted elsewhere in this bulletin John W. Trask, Assistant Surgeon General, United States Public Health Service, shows the relation between health officers, physicians and state health departments in securing proper morbidity reports. He points out, and very justly in our opinion, that accurate morbidity reports are necessary, not only to assist in the inauguration of preventive measures, but also as a source of information concerning diseases, some phases of which are still unknown, to ensure correct data concerning the geographical distribution of disease, and, more than all, to check the influence of particular preventive measures, and to measure the efficiency of health organizations. In the business world the amount of the turnout, compared with the investment, number of employees and overhead expenses, is the criterion of success or failure. The time is soon coming when the business measure will be applied to health organizations, and the reduction effected in morbidity and mortality will be the means of determining the continuance or dismissal of health officials in office.

MORBIDITY REPORTS NOT A LOCAL MATTER.

In order to secure the best results from morbidity statistics, which are not only of state but of national importance, the federal government should have such a measure of jurisdiction that its public health service will be able to guide, direct and control their collection and collation. This being provided for by the appointment of a collaborating epidemiologist in each state. The Secretary and Executive Officer of the Ohio State Board of Health has been appointed in this capacity and consequently the morbidity reports of the state will be collected under the jurisdiction and by the authority of the federal government. On the back cover of this bulletin will be found a list of diseases now reportable in Ohio, and on page — appear the regulations adopted by the State Board of Health at its last meeting in regard to morbidity reports.

Bulletin of the Ohio State Board of Health for November, 1914.

SETTING HIM RIGHT.

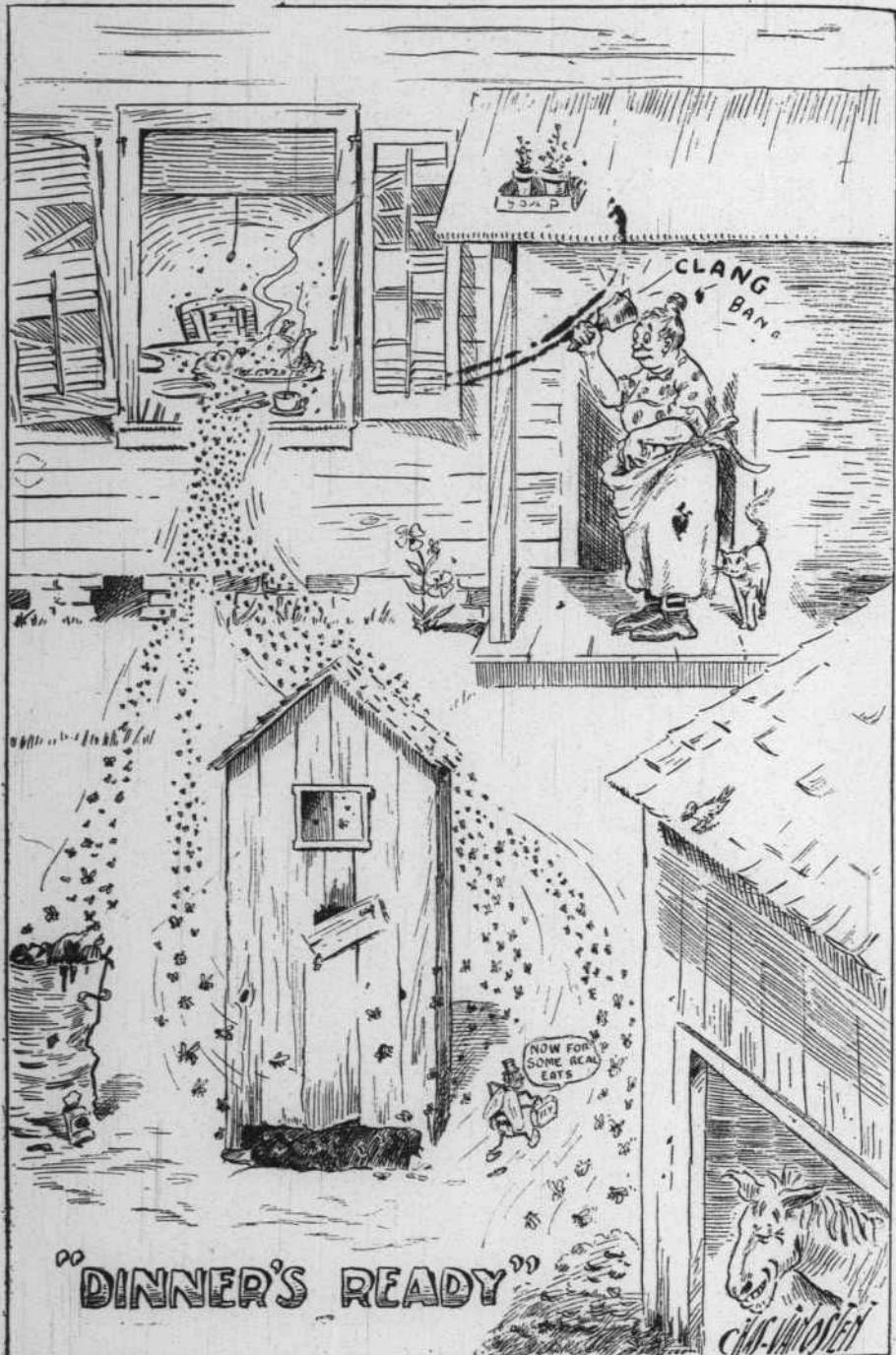
John was home from college for the winter vacation, and before long was infatuated with the beauty of a neighbor.

His father noticed his evident admiration.

"Did you notice how ole Mason's daughter have shot up, Jack?" he asked his son one day. "Seems to me she is gettin' quite a handsome young critter."

"Father," said Jack, enthusiastically, "she is as beautiful as Hebe!"

"As he be?" ejaculated the old man. "Blame it all, where's your eyes, boy? Joe's got a face like a pig in a fit. It's her mother she gets her looks from. She's as beautiful as she be!"—*Grit*.



P.H.R.

FLORID



Health Notes

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Published Monthly by the

STATE BOARD OF HEALTH

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Vol. IX JAN 16 December, 1914 No. 12 (New Series)

HON. FRANK J. FEARNSIDE, President, HON. S. R. MALLORY KENNEDY, M. D.,
Palatka, Fla. Pensacola, Fla.
Health Service G. MEMMINGER,
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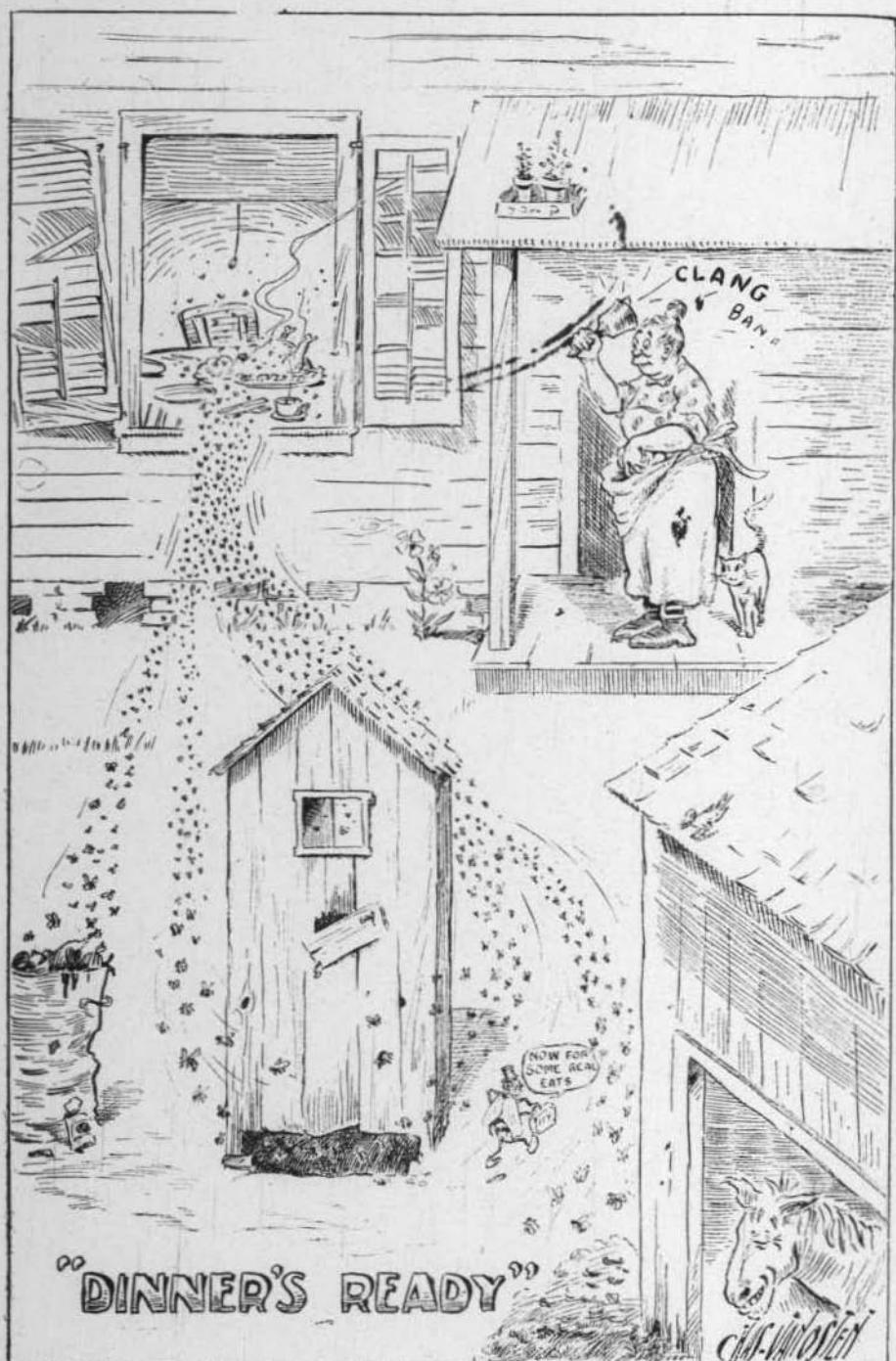
BRANCH LABORATORIES:

State Board of Health Building, Tampa; City Hall, Pensacola; Duval St., Key West; Burdine Bldg., Miami; Hirschberg Bldg., Tallahassee.

Sent to any address in the State for the asking.
If you receive it without asking, it means that someone else has requested it for you.

When you change your address drop us a card.
When giving change of address, give both the old and the new.
Anything you want to know about the public health we will try to tell you.
Any information you want about communicable diseases of domestic animals we will help you to get.
Address communications to Jacksonville, Fla.

"The public health is the foundation on which reposes the happiness of the people and the power of the country. The care of the public health is the first duty of a statesman."—Disraeli.

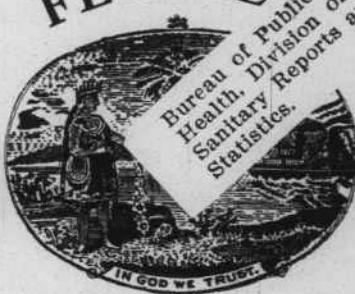


"DINNER'S READY"

CHAS. W. ROSEN

R.H.R.

FLORID



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LIST OF STATE BOARD OF HEALTH PUBLICATIONS FOR FREE DISTRIBUTION.

- Poster 58, From Flies and Filth to Food and Fever, 1908, Third Edition, 12"x23".
Poster 67, The Evolution of Consumption, August, 1913, Second Edition, 22"x30".
Publication 76, Hookworms, leaflet, revised August, 1910.
Publication 77, The Housefly, Second Edition, May, 1914, pp. 11.
Publication 82, Twenty-Second Annual Report of the State Board of Health of Florida, 1910, pp. 171.
Publication 86, Prevention of Ophthalmia Neonatorum, 1911, pp. 3.
Publication 88, Typhoid Primer, December, 1911, pp. 45.
Publication 89, Hog Cholera, January, 1912, pp. 12.
Poster 90, Smallpox Vaccination, April, 1912, 18"x24".
Publication 92, Rules and Regulations of the State Board of Health and Public Health Statutes, with Supplements, March, 1912, pp. 77.
Publication 93, Twenty-Third Annual Report of the State Board of Health of Florida, 1911, March, 1912, pp. 372.
Publication 96, Medical Inspection of Schools, June, 1912, pp. 13.
Publication 97, Lung Worms and Hog Cholera, 1912, leaflet.
Publication 99, Sewage Disposal for Rural Homes, Revised, Second Edition, August, 1914, pp. 10.
Publication 100, Twenty-Fourth Annual Report of State Board of Health of Florida, 1912, February, 1913, pp. 232.
Publication 101, President's Letter of Transmittal, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 12.
Publication 102, Typhoid Fever in Tampa, Reprint from 24th Annual Report of the State Board of Health of Florida, 1913, pp. 24.
Publication 103, Cattle Tick Eradication, Reprint from the 24th Annual Report of the State Board of Health of Florida, March, 1913, pp. 54.
Publication 104, Hookworm Disease, March, 1913 (Second Edition), pp. 70.
Publication 105, Malaria, April, 1913, pp. 8.
Publication 106, Mosquitoes, May, 1913, pp. 16.
Publication 107, Facts About Hog Cholera Serum and its Distribution, December, 1913, pp. 4.
Publication 108, Diphtheria, March, 1914, pp. 4.
Publication 109, Measles, March, 1914, pp. 4.
Publication 110, Scarlet Fever, March, 1914, pp. 4.
Publication 111, Smallpox, March, 1914, pp. 4.
Publication 112, Twenty-Fifth Annual Report of the State Board of Health of Florida, 1913, March, 1914, pp. 293.
Publication 113, Hog Cholera Serum, April, 1914, pp. 8.
Publication 114, Annual Report of the Veterinary Division of the State Board of Health of Florida, 1913, Reprint from the Twenty-Fifth Annual Report of the State Board of Health of Florida, May, 1914, pp. 65.
Publication 115, Annual Report on the Treatment of Indigent Crippled Children, 1913, Reprint from Twenty-Fifth Annual Report of the State Board of Health of Florida, May, 1914, pp. 8, inserts 12.
Publication 116, Address of the Chairman of the Section of Preventive Medicine and Hygiene, Dr. Joseph Y. Porter, Southern Medical Association, Lexington, Ky., November 17-20, 1913. Printed in Southern Medical Journal February, 1914, Reprint from Twenty-Fifth Annual Report of the State Board of Health of Florida, May, 1914, pp. 15.
Publication 117, Imhoff Tanks, May, 1914, pp. 6.
Publication 118, Hookworm Disease and Soil Pollution, May, 1914, pp. 13.
Publication 119, Anti-typhoid Vaccination in the Army in 1913, June, 1914, pp. 7.
Consumption Leaflet, June, 1914.
Publication 120, Rules and Regulations for the Importation of Domestic Animals into Florida, August, 1914, pp. 4 (Supplement to Publication 92).
Publication 121, Vital Statistics, All Florida Municipalities can have Vital Statistics, Leaflet, Reprint from Florida Health Notes, August, 1914.
Publication 122, Common Sense in Contagion, October, 1914, pp. 8.
U. S. Public Health Service Bulletins (Limited Supply on Hand for Distribution):
Public Health Bulletin No. 48, Pellagra, September, 1911, Second Edition, pp. 42.
Reprint No. 116 from Public Health Reports, February 7, 1913, County Schools and Rural Sanitation, pp. 5.
Reprint No. 120 from Public Health Reports, October 25, 1913, Pellagra, pp. 48.
Reprint No. 150 from Public Health Reports, November 7, 1913, The Citizen and the Public Health—The Individual's Relation to the Health of the Community, pp. 8.
Reprint No. 209 from Public Health Reports, July 17, 1914, Bubonic Plague, pp. 21.
State Board of Health Notices and Circulars:
Notice of Change in Regulations Governing Distribution of Hog Cholera Serum, September 25, 1914.
Instructions to Agents Regarding the Simultaneous or Double Method Treatment for Hog Cholera, October 1, 1914.
Partial List of Nearby Plants Selling Hog Cholera Serum and Virus.
Vital Statistics—Model Ordinance and Circular Letter.
Vital Statistics—List of Florida Municipalities.
Vital Statistics—Tabulation of Reports of Florida Registration Cities for First Half Year, 1914.
Notice of Sale of Hog Cholera Serum and Virus by State Board of Health.

THE CHRISTMAS SPIRIT IN MEDICINE.

The following taken from the editorial page of the *Wisconsin Medical Journal* of last year is so beautiful in thought that it is reproduced in THE NOTES with a certain feeling that the sentiment and lesson will be appreciated by its readers:

"It was at this season, just twenty-five years ago, that Robert Louis Stevenson published his essay called, "A Christmas Sermon," in which, in his gentle way, he pointed out the dignity and greatness of some of the simple, hum-drum virtues and duties of life, and the difficulty of attaining even a moderate degree of success in their practice. We are apt, he says, to ask for 'higher tasks, because we do not recognize the height of those we have. Trying to be kind and honest seems an affair too simple and too inconsequential for gentlemen of our heroic mold. And then he soon continues with the familiar lines: 'To be honest, to be kind, to earn a little and to spend a little less, to make on the whole a family happier for his presence, to renounce when that shall be necessary and not be embittered, to keep a few friends but these without capitulation—above all, on the same grim condition, to keep friends with himself—here is a task for all that a man has of fortitude and delicacy. He has an ambitious soul who would ask more; he has a hopeful spirit who should look in such an enterprise to be successful.'

"No one has a better opportunity than the physician to put these principles into practice—to actually live them. And to the honor of the profession be it said, most of its members are doing these very things every day of their lives, without any effort or self-consciousness.

"But as we approach the ending of the old year and beginning of the new we can all profitably look back over our lives for the last twelve months and see how well our work measures up to the simple but high standard of being honest, being kind, and keeping our self-respect.

"For the physician, being honest means so much more than simply keeping out of financial difficulties; it means giving honest service. It means earnest preparation, faithful study, careful methods, conscientious devotion to the interests of the patient, fair dealing with all.

"And being kind is far from being an easy thing; it is not merely patting the old ladies on the shoulder and chucking the babies under the chin. It means striving to be truly helpful, to understand the doubts and perplexities and anxieties of our patients and their friends. It means a willingness to forget ourselves and think only of the welfare of the patient when other advice is needed, or special care is required which we are not qualified to give. It means cheering and strengthening the weak-hearted and 'helping the lame dogs over the stiles.'

"Keeping friends with himself, keeping his self-respect, is no easier a task for the physician than for the layman. In many respects it is harder, the temptations are so great, the excuses he can give himself are so plausible. Fee splitting in some of its sugar-coated forms may have seemed so comfortable and convenient a way of replenishing a lean bank account. Failing to examine a urine or a sputum may have seemed so excusable when the patient complained only of headache or

of indigestion. People are so unwilling in many cases to permit thorough, careful examinations to be made. A brother practitioner may really have laid himself open to criticism by some thoughtless remark. But do not these and the scores of other excuses of equally plausible character all serve to lessen his self-respect, to keep him less truly friendly with himself?

"Surely 'here is a task for all that a man has of fortitude and delicacy.'

"In the same essay to which we have referred Sevenson says: 'There is an idea abroad among moral people that they should make their neighbors good. One person I have to make good: myself. But my duty to my neighbor is much more nearly expressed by saying that I have to make him happy—if I may.'

"The great privilege of the medical profession is that the physician has so many 'neighbors,' using the word in its best and broadest sense, that to him is given the opportunity of making happy—if he may—more of his fellow beings than fall to the lot of almost any other class of men.

"The tombs of Egypt have yielded up to us the story of the first physician known to history who lived six thousand years ago, three thousand years before the days of Æsculapius. This great physician was a royal minister as well, a priest, a writer, an astronomer, and an architect of distinction, having been the first to build with hewn stone. But if we knew naught of him but his name he would still be worthy of our reverence, for from that we can form a picture of the manner of man he must have been. To him was given the name of I-Em-Hotep which being translated means 'He who cometh in peace.'

"Good he must have been, rising above the jealousies and littlenesses which were a part of human nature then as now; learned he must have been in the wisdom and experience of his time; skilful he must have been in their application; all this is shown in the loving title bestowed on him.

"So we see that though the outward forms of practice in our profession change in the course of the centuries, the fundamental principles have not changed and today we need as much as ever the integrity, the learning, and the skill which have brought down to us the name of I-Em-Hotep, in order that we may effectively do our duty to our neighbors, and help to bring to them the Christmas Spirit of Peace and Good Will Toward Men."

THE BREAKING OF THE DAWN.

It is certainly gratifying to note the increasing interest in health affairs which is daily being shown by the people. Ignorance and prejudice are gradually being pushed to the rear and the "thinkers" are coming to the front and telling the public many plain truths. THE NOTES has said for many years that if people would only think and be controlled by reason and investigation of subjects connected either directly or indirectly with their own health, the "light of day" in established facts would soon be convincing proofs of truths which preventive medicine teaches. Therefore, when such plain talks appear as the

Gainesville Sun gives in the editorial column of a recent issue, and which is here reproduced, THE NOTES rejoices, and not only is gladdened in spirit, but is deeply grateful, for it sees the breaking of a dawn in health education which the press of the state can help to hasten and perfect:

VACCINE POINTS AND ANTITOXIN SERUM.

"There never was a truth without a counterfeit, and never a good work wrought for humanity but that some calamity-howler has set up a protest. Strange as it may seem there are a lot of people who are opposed to vaccination and to the use of antitoxin serum in cases of diphtheria. It is not to be wondered that the Christian Science cult should object to those methods of treating disease for it is in direct opposition to their most sacred teachings. But that ordinary citizens of the country should oppose those means of checking and often abating the ravages of those awful diseases, smallpox and diphtheria, is more than a man of common intelligence can understand.

"There is a reputed health magazine published somewhere in the New England country which is devoted especially to arousing the antagonism of the people of the country against these salutary means of combating the two most fatal diseases known to man.

"Before Dr. Jenner discovered the fact of vaccination there was no means of stopping, or even of checking the ravages of that awful pestilential disease, smallpox. Most of those who contracted it were doomed to certain death, and those who escaped with their lives were so marred and disfigured that their friends could hardly recognize them. Whole communities were literally swept into the grave. Out in California the early Spanish settlers brought the disease to the country and communicated it to the Indians of the Sacramento valley, and they died so fast that their bodies were strewn over the country for miles with not a soul left to dispose of the dead.

"When diphtheria first made its appearance it carried off whole families of children in a week, and all the skill of the best physicians in the land of that day could not abate its onslaughts in the least. It certainly was a pitiful sight to see a family go out to the graveyard day after day, with unbroken regularity, and lay their darlings away in the grave one after another till all were gone. This is no idle tale. The writer of these lines passed through just such scenes as this in his boyhood days, and the graves are there to this day in seried ranks of grass-covered mounds over baby graves.

"During the civil war there was a prison near by his home, and morning after morning there was a grawsome march of a dozen or more ambulances in each of which there was the body of a brave Southern soldier who had succumbed during the previous night to the dread scourge of smallpox.

"In those days what vaccination was done was from virus obtained from the scab off another person's arm, and there was some ground for objection to its use in that it was supposed that any blood disease which the original had was communicated to the patient. Also there was always danger of septaemia or blood poisoning.

But all that is a thing of the past now. The virus points are obtained under the most sanitary and antiseptic conditions possible, and there is very seldom a case in which any serious conditions are developed. But granting that a certain per cent do manifest untoward conditions and that some actually die from the effects, is that at all commensurate with the loss of life from the disease itself? Not at all.

"Where vaccination is properly administered and every child in the community has been properly treated there is absolutely no more smallpox. The same may be said of the use of antitoxin serum. Its early use in the disease gives absolute immunity to any dread consequences. Just the other day a house was discovered here in Gainesville on which there was a diphtheria sign. The mother was all smiles when she talked about the case. There was no apprehension that her darling would be taken away from her, but on the other hand she joyfully related the drop in temperature from day to day, and looked forward only to this child's speedy recovery.

"Let all the citizens of our fair city stand squarely behind the board of health and blot out these hideous diseases."

DISEASE AND THE WAR.

The news of the outbreak of typhoid fever, first among the Belgian troops and now among the Germans, is not a surprise. Indeed, for some time it has been almost certain that the war censors were quietly suppressing all the news of disease as well as of other forms of disaster to the armies. There has never been a war yet in which typhoid fever has not killed at least as many men as the bullets of the enemy, and often it carried off five times as many. Rapid as were the movements of the armies in the Franco-Prussian war, they had to suffer severely from the disease.

Fortunately many of the soldiers have been protected by means of inoculation against typhoid fever, but it is quite impossible as yet that this protection should be made absolute. One of the sad but quite certain effects of the war, then, will be a very serious spread of the disease, especially among the young soldiers, with untold suffering and death from it.

War and pestilence have always gone together in the past, and in spite of the advance in preventive medicine and the triumph of sanitation that is possible under such favoring circumstances as those at Panama we cannot hope that large masses of men can be irregularly and often meagerly fed in damp trenches, amid constant alarms and disturbances of sleep, without the most serious lowering of resistive vitality and inevitable contagion. Before the new year begins we must be prepared to hear without doubt of very large numbers of sick who have to be cared for in the war hospitals.—*New York Herald.*

"Have you any taste for eugenics, Mrs. Comeup?"

"I've never tried 'em. Do they taste best fried or boiled?"—*Baltimore American.*

THE SOCIAL STATUS OF MEDICAL PRACTICE.

The following excerpts are from an address by Dr. E. P. Lyon, Dean of the Medical School, University of Minnesota, before the graduating class of the St. Louis University School of Medicine, June 1, 1914. Though delivered to a body of physicians and of particular interest to them, this address contains many thoughts which should be of interest and value to all who are interested in the great problems of public welfare and public health:

* * * * I wish you to see that more and more through the ages the altruistic note has become dominant in human affairs. First it was the family for which man limited his individual freedom. Next it was the neighborhood. Next, the tribe. Next, the nation. And with each recognition of altruistic obligation has come further surrender of the individual and further advance of civilization. Today it may be prophesied safely that no individual right, whether of property or person, will be allowed permanently to stand which conflicts with the prosperity, happiness or health of the organized whole. * * * The right of society to health is one of the latest rights to be recognized. The right and duty of society to secure and protect health are bound more and more to come to the front as prime motives in limiting the individual. This is a fact of growing significance. It is bound to affect your lives. * * * Medicine began and has continued until recently quite strictly as an individualistic calling. The nature of the profession led inevitably to this history. Men are sick as individuals. Treating their ailments began as a personal service. As society advanced the intimate relation of patient and physician came more and more to be emphasized. Reasons of business expediency, of personal modesty and of family intimacy made the relation confidential. The individualistic desire to get well is an instinct ever clamorous and insistent, whereas the social value of health is an intellectual concept only slowly gaining acceptance and still more slowly becoming a moving force. We willingly pay to be relieved of individual pain and immediate bodily embarrassments. We have not yet achieved such breadth of vision as to pay to be protected from that which threatens the social body, but may not come to us individually. * * * *

* * * * With the knowledge, however, of the nature and cause of disease acquired in the last half century, a change has begun whose effects are already plainly perceptible and whose eventual far-reaching results over your profession no one at present can foresee. We know now that disease is never wholly an individual matter. Some diseases are predominantly social. Consequently your relation as physician, to persons afflicted with these diseases must involve a relation to the whole social body. You cease to be merely a seller of merchandise. Your dealing is no longer exclusively with the individual. You become the servant of the whole people. Society already places explicit duties on you, and by implication requires many more. As time goes on it will demand still others. Medicine is losing its individualism. This you must recognize, and you must adjust yourselves to the new condition. More than that, you must lead, if you are men worthy of

these diplomas, you must lead society in the great movement to eliminate disease. You must become less and less sellers of healing and more and more the captains of health. This means in the end a broader responsibility and a more dignified station. But meanwhile it means readjustment and possible hardship. How are you of the next generation of doctors going to face this great social movement? Are you going to sit back on the cushions of ancient privilege? Are you going to rest content on ideals of personal service? Or will you rise to the concept of higher duty? Surely these things are worthy of your best thought as you enter and carry forward the work of your profession.

It is therefore not in any ordinary spirit of interest but rather with high inspiration that you are asked to consider more specifically, for these last few minutes, some of the movements and signs of the times.

First there is the wonderful and far-reaching activity known as public health or preventive medicine. This movement finds its scientific foundation in Pasteur's demonstration of the cause of disease and the nature of infection. It finds its mathematical verification in vital statistics. It finds its financial justification in the value of the human animal. But it finds its moral justification in the altruistic ideal of race welfare and community happiness.

It is hard to discuss this question without resort to statistics. We might show that the average length of human life in Europe has increased from eighteen or twenty years to over forty years. We might quote the death rate in New York City as 36 per thousand in 1866 and 14 per thousand in 1913. We might estimate what this means to the wealth of the world, when considered "in conjunction with the simple proposition that *wealth is always and only the result of human labor.*"

On the other hand, we might point to the enormous work yet to be done. We might dwell on our national crime of 1,100 preventable deaths a day—fifty lives, perhaps a hundred, in this land of ours, snuffed needlessly out while we sit here during these exercises.

* * * * * The significance of these statements for every man and every woman everywhere is easily appreciated. If there is such a thing as social consciousness, if there is such a thing as group activity, then each of us must either engage in that activity or act as a drag on social progress. If there is such a thing as group responsibility, then each one of us is responsible. Who shall doubt that there is such consciousness, such activity, such responsibility? Only he who denies absolutely the altruistic ideal. It behooves us, therefore, each and every one to study, endorse, support and actively engage in the public health campaign. If we do less we are false to our duty as men. This applies to all men. It applies particularly to physicians.

* * * * * The doctors must be the explorers and pioneers of this great movement for race betterment. This mission they are attempting in every way to accomplish. They *ought*, further, to be the active leaders of public sentiment, the molders of political action and the most scrupulous supporters of every legal regulation.

* * * * It is true that physicians as a whole give assent to the principles of preventive medicine. They endorse the health movement, although they know it means diminution of their business. Moreover, practically without exception, they practice those methods of routine in their professional work which are calculated in a measure to limit the spread of disease. Through their associations they carry on an active and valuable campaign of education, and assist in the indispensable political propaganda.

It is as individuals that they fail. And they fail because they still take the narrow individualistic view of their work. They get the patient so close to their eyes that they cannot see the public. They consider their trade and fail to recognize their profession. How many of them, for example, find it convenient to fail to report cases of infectious disease? How many connive at violation of quarantine? How many give weak support to public officials in health matters? I may be wrong in the impression that the number guilty of all these offenses is large. But I am not wrong in the observation that far too few physicians are accurately informed on matters of public health. Far too few are leaders of public sentiment. Far too few even make serious effort to educate their own patients in their public duties. Many valuable measures fail through the indifference of the profession. Many reforms are delayed for years because the doctors are afraid to be reformers. Moreover one need not search far to discover evidences of active opposition. In England the medical association opposed to the last moment the great insurance act.

You may say that one should not expect the doctors to be different from other people when they see their business involved. But these are educated men and should be alive to the spirit of the times. Many of them are behaving at present much as did the spinners and weavers when power machinery was introduced. Surely the most highly trained profession should rise above the motives of ignorant workmen.

Says Macilwaine:

The overwhelming majority of the profession do not concern themselves with prevention.

Says Ditman:

Disease, crime, pauperism, insanity and preventable accidents are the foulest blots on the modern civilized state, and the responsibility for the amelioration of these curses must be faced on the last analysis by the medical profession.

You may point to the important accomplishments in sanitation and public hygiene, and claim the credit for the medical profession. I grant the importance of the achievements and acknowledge in large measure the justice of the claim. These accomplishments, however, involved for the most part, the control of matter and natural forces—what has aptly been termed the “non-human environment.” They were largely engineering problems such as waterworks, filtration plants, sewers and garbage incinerators. Or they involved control of lower forms of life such as mosquitoes, ticks and rats. The things that are to be done are vastly more difficult because they involve the human animal. Every

step from now on must begin with a limitation of individual freedom and individual rights to property. Inherent and heedless egoism is the great barrier to progress in preventive medicine. Not bricks or cement, but human psychology is the material henceforth to be worked on in public health. Only by the painfully slow process of education can the altruistic motive gain ascendancy, and only as such ascendancy is gained will control of the preventable diseases be realized.

In this tremendous but not superhuman task of education the doctors must take the lead. And in proportion as they realize the task and work on it with all their strength, privately and collectively, with their patients as individuals and with the public at large, only thus will they realize the fullness of the term "doctor," which means primarily *one who teaches*. Remember this all ye physicians. And you who tonight receive your diplomas, whenever you look at those documents framed on your office walls, translate in your hearts the words *Medicinae Doctor* in "Teacher of Medicine," and exalt your profession thereby.—*The Journal of the American Medical Association*.

HOW DISEASE BACTERIA PASS FROM PERSON TO PERSON.

There are three principal ways in which disease germs are carried from person to person; and those ways may be easily remembered by three catch words—Food, Fingers and Flies.

The most important foods which carry disease are those which are eaten raw since thorough cooking destroys disease germs and most cooked foods are only dangerous when they have been infected in the kitchen after cooking. Among raw foods, too, many, like oranges, are safe because they are peeled before eating. Of all foods the most dangerous are water and milk, because they are often polluted (by sewage in the case of water, by human contact in the case of milk), because they are drunk promptly without time for the disease germs to die out, and because, usually in the case of water, and often in the case of milk, they are not cooked.

The second way in which disease germs are commonly spread is by means of contact between people themselves. Fingers in our catch word stands not only for the fingers themselves but for all sorts of ways in which human excretions may be exchanged. In measles and whooping cough and scarlet fever and diphtheria and tuberculosis and many other diseases, the germs are present in the nose and throat and are spread from person to person by the fingers, which go too often to the mouth and nose, by drinking cups and spoons and other things which too often are used in common, and by the fine spray thrown out from the mouth in coughing and sneezing. In typhoid fever and diarrhoea, and similar diseases the germs are found in the intestinal discharges and here, too, soiled fingers play an important part in the transmission of the diseases.

The third common way in which disease germs are spread is by means of insects. Flies are, perhaps, the most important insect germ carriers in our state. They often pick up infected material on their legs

and bodies and carry it to food, and where there is no good system of sewage disposal they may play a part in the spread of such diseases as typhoid fever. A certain kind of mosquito carries malaria, and this, too, is important in certain districts of New York, on Long Island Sound and along the Hudson river. In tropic countries a whole host of diseases is carried by insects.—*Health News* (N. Y. State Dept. of Health).

DOLLARS VERSUS DEATHS.

The art of sanitation has a widely different basis from those applied sciences which draw their conclusions on mathematical principles. An engineer can calculate to a nicety the cost of a city lighting plant, the cost of its maintenance, and the exact results which will be obtained; and the corporation employing him will be able to determine closely what return the money invested will bring. The sanitarian, on the other hand, while he deals with the costs of public health work in hard cold dollars, finds on the results side of his accounts savings in deaths which cannot be determined precisely, savings in sickness which are still less exact, and sociological and sentimental factors which cannot be determined at all. The biological sciences upon which sanitation is based and the human material upon which it operates are in their very nature insusceptible mathematical precision; even the results of vital statistics, "the bookkeeping of public health work," require analysis and interpretation which takes account of the fluctuations and inexactitudes of their original data.

Statistics are, however, becoming constantly more accurate and sanitary science more quantitative. Health officers make predictions and promises with more confidence and certainty. And now from Rocky Ford, Colorado, comes a proposal unique in its courage. The health officer of that community, having surveyed the public health situation and made his specific recommendations, addressed his board as follows:

"You gentlemen, as the board of health and legislative council of this community, are directly responsible, and I as your executive officer if I fail to do my part, if another epidemic of typhoid breaks out in our town. * * * I wish I could force this home upon the conscience of every state and municipal legislator in Colorado. * * * A quarter of a century ago this could not have been said. But increasing knowledge brings increased responsibility. * * * This matter cannot be waved aside as a visionary ideal based on impractical theories. * * * We act today on fact. The visionaries were the Pasteurs, the Listers and Flints of the generation preceding us. * * * They were true prophets. * * * So confident am I that what I tell you can be made true here, that I make you this offer. We will take the year of 1913 as a basis; give me the ordinances and regulations I ask, with authority and funds to enforce them; give me a competent salary so that I may devote my whole time to public health work; if the death rate during the third year is not less by at least three to the thousand, I will return the amount of my salary to the city, and I will put up a bond in the beginning to secure you."

Bold words these, of the sort that shake the inertia of lagging town and city governments. How far the proposal in this particular case is justified we do not presume to judge; the health officer of Rocky Ford has doubtless reckoned up his conditions before making his predictions. The significant point is, as he remarks, that a quarter of a century ago no health officer would have dreamed of making such a promise; today the mere fact that it is made by even one health officer is a sign of the times.

The offer was not accepted and the prediction tested, but with the data now available from fields where definite results have been obtained from definite expenditures and efforts—measured reductions in typhoid fever, diphtheria and other communicable diseases, in infant mortality, and even in slowly yielding tuberculosis—quantitative forecasts conservatively based on sound data are certainly justified. Already the time is foreshadowed when vital statistics will be comparable in exactitude with financial statistics, and when any excess above an accurately determined “normal” death rate for each community will be regarded as a mark of culpable municipal negligence.—*The American Journal of Public Health.*

PUBLIC HEALTH EDUCATION AND THE PRESS.

W. A. EVANS, M. D., *Director, Health Department, Chicago Tribune.*

To make further headway in public hygiene in New York state it will be necessary to change some of the customs of the people. To make further headway in personal hygiene it will be necessary to change some of their habits.

In its earlier stages a health department can secure material benefits by such administrative acts as the removal of gross filth. But soon it enters in the period of diminishing returns and presently it has arrived at the point where further progress necessitates changing public customs and personal habits.

To change customs and habits is no easy matter, but both can be done. I remember when we started to change Chicago's Insane Fourth habit, Father Dorney told us that it was a custom of the people and could not be changed. It was changed. Custom can be changed if it should be changed, provided you go at it in the right way and “stick.” Any habit can be changed but the job is never an easy one.

Customs and habits cannot be changed by laws nor by the administrative activities of any health department. To get the people to change their customs and habits you must persuade them. This means that to get health results which are really worth while, a health department must make use of publicity. For the education of children we have the public schools. Through them changes in customs and habits can be brought about—but a generation is required for the process.

POLITICS AND THE PRESS.

To educate adults many agencies are available. Two overshadow the others—the newspapers and politics. On the few subjects covered by political debate, politics is easily first as a public educator. Nothing

equals it in catching public attention, stirring public sentiment and stimulating public thought. Some day, public health will get into politics and then great health measures such as the German and English insurance laws will be passed.

Next to politics, as an educator of adults, ranks the newspaper; to change the customs and habits of the people you must get into the newspapers. Unlike politics the field is one of the present. The newspapers are ready now to discharge their duty as agents for the promotion of public and private hygiene.

To live, newspapers must circulate. To circulate, they must print the news, educate and entertain. To live, they must carry advertisements. To secure advertisements, they must introduce their advertisers to their readers in an atmosphere of integrity. For this it will be necessary that a paper should have character. Its readers must have confidence in it. To hold the confidence of its readers, it must fight for principles, it must promote those things which better the lives of men.

The newspapers are ready to do their duty in the health campaign. It is the health officers who must furnish the materials.

Works have been written on the psychology of advertising. There is a right way to present a subject to a miscellaneous audience and there are wrong ways. If you are to make advantageous use of this great new machine for moulding public opinion you must study the popular mind. You must master the art of approach. To know your story is not enough. You must learn to tell it in a way that catches attention and then convinces. The State Department of Health of New York realizes these principles. There is not a single Health Officer in the state who cannot profitably apply them in his own local field.

OUR KNOWLEDGE OF CANCER.

It is a curious trait of human psychology that while we accept with thanks a caution against slippery ice, a racing automobile, an ocean swim, and many hazards well known to involve mortal risk, custom and only custom rules against attention to the early signs of cancer. It is therefore the purpose and earnest endeavor of the American Society for the Control of Cancer, and all who are engaged in the campaign against malignant disease to modernize the custom in this respect and to establish a premium on that wary intelligence which will permit an educated man or woman to recognize the approach of danger and take the saving steps in time. Dr. Alfred Russell Wallace once said that the nineteenth century had done more than all previous time in the pursuit of knowledge essential to human welfare, and had done less than any other time to make that knowledge available for human needs. The twentieth century begins with far more deliberate attention to this need. Intelligent people everywhere, and especially in America, are more and more inclined to apply the standard of utility to the products of science. In choosing among the lines of scientific endeavor we ask and demand that their relation to human welfare should be prominently considered.

Not long ago an eminent association of specialists in cancer research publicly declared its belief that the new and old knowledge of this disease is not effectively employed and that it is not necessary to know all about the nature and causes of cancer in order to limit its mortality. These scientists before turning back to their laboratories to delve deeper into the mysteries of malignant disease, did not fail to discharge their immediate responsibility to the cause of human welfare. With whatever influence they possessed they urged the need of a countrywide effort to disseminate the present knowledge of cancer, both in the medical profession and among the people generally. This call was characterized by a tacit assurance to medical and lay enthusiasts that we are not about to witness the miracle of a universal cure for advanced cancer, but may accomplish almost as much through prevention and through early diagnosis and treatment. The Society subsequently organized to carry on this campaign believes that every man and woman should be acquainted with the early signs of preventable and curable cancer, and that this knowledge when fully disseminated will very greatly reduce the number of deaths and the number of advanced cases.

There is much about cancer that is obscure. We do not know why the rebellious tissue cells grow wild and destroy their host. We may never know. Neither do we know the cause of gravitation or chemical affinity. These are ultimate facts about nature that are inaccessible to solution, but this ignorance does not prevent us from making considerable use of gravity and chemistry. What we do know about cancer are the conditions leading up to it and the proper use of this knowledge is a very small part of the subject but it is sufficient for the present to accomplish great results.

The fact of the greatest practical importance in our present knowledge of cancer is that the disease in its early stages is purely local and can be successfully removed from the system by surgical means. In the second place we know that irritation in many different ways plays a most important part in the development of the various forms of cancer. This knowledge gives an important direction to efforts toward prevention and cure. The sources of constant irritation to any part of the body should be removed.

In external cancer there is something to be seen or felt, such as a wart, a mole, a lump or scab, or an unhealed wound or sore. Pain is rarely present. Cancer inside the body is often recognized by symptoms before a lump can be seen or felt. Continuing indigestion, with loss of weight and change of color, is especially suspicious. Persistent abnormal discharge should arouse suspicion of cancer, particularly if the discharge is bloody. The early and hopeful stages of cancer are usually painless.

Knowledge of cancer is truly the power to save life. If all patients would seek examination and competent advice immediately on the appearance of signs suggesting cancer and would submit to the simple and certain operation necessary to remove the disease the number of cures would be enormously increased. Alert intelligence and courage replacing present ignorance and fear would save the majority of suf-

ferers from this disease.—*Press Service, American Society for the Control of Cancer.*

WHY HAVE MALARIA?

(It is certainly encouraging to note the increasing interest on the part of the State Press on preventable diseases, and therefore the NOTES reproduces the following on "Malaria" from the *Suwannee Democrat*.)

There is a neighborhood in this county where malaria runs rampant every fall. There is no apparent reason for it, except the carelessness of the people. Their houses are unscreened, and open, for they insist on ventilation. There is hardly a mosquito net in the neighborhood, and some few of the families allow water to accumulate and become stagnant in tubs, barrels and even in tin cans. Mosquitoes breed in those places. When a person gets sick the others come to take care of him. If he has malaria, these same mosquitoes that bite him bite his friends. It is well known that malaria is thus carried. Yet they go on in the same old way. In one family there were three "down" at one time. A lady who nursed them, now is seriously ill with malaria. Her husband has just recovered, and their nurses have a fine chance of escaping it. One fine young man, at this writing is critically ill, and a child has but recently been buried. All from malaria. A few cents worth of cheese cloth makes an excellent bed screen. Wire for all the windows in the houses common to the country would cost but a few dollars. Will the people never cease to allow the insects to murder their children? Will they never awake to the fact that screen wire and mosquito netting is the best investment they can make? Mosquitoes are not worse here than in almost any other state, but other people screen against them. Indiana, Illinois, Missouri were all deemed in their early settlement as almost unfit for human habitation because of the prevalence of malaria. Medical science did not then know how malaria was spread, but mosquitoes robbed the people of sleep and they screened. Medical science did not then understand how malaria was communicated from one to the other. It knows now, and he who deliberately sets his knowledge up against the medical man and says that mosquitoes do not spread or convey malaria takes upon himself a fearful responsibility for the lives of his children.

Farmer (excitedly entering village inn)—What do you think, Enery? The bones of a prehistoric man 'ave been discovered on Jim White's farm.

Innkeeper—You don't say. Well, I 'opes poor Jim 'will be able to clear 'issel at the coroner's inquest.—*Boston Transcript*.

Kind Old Lady—While you were gone, little girl, a bad boy came up to the porch and ran away with your licorice babies.

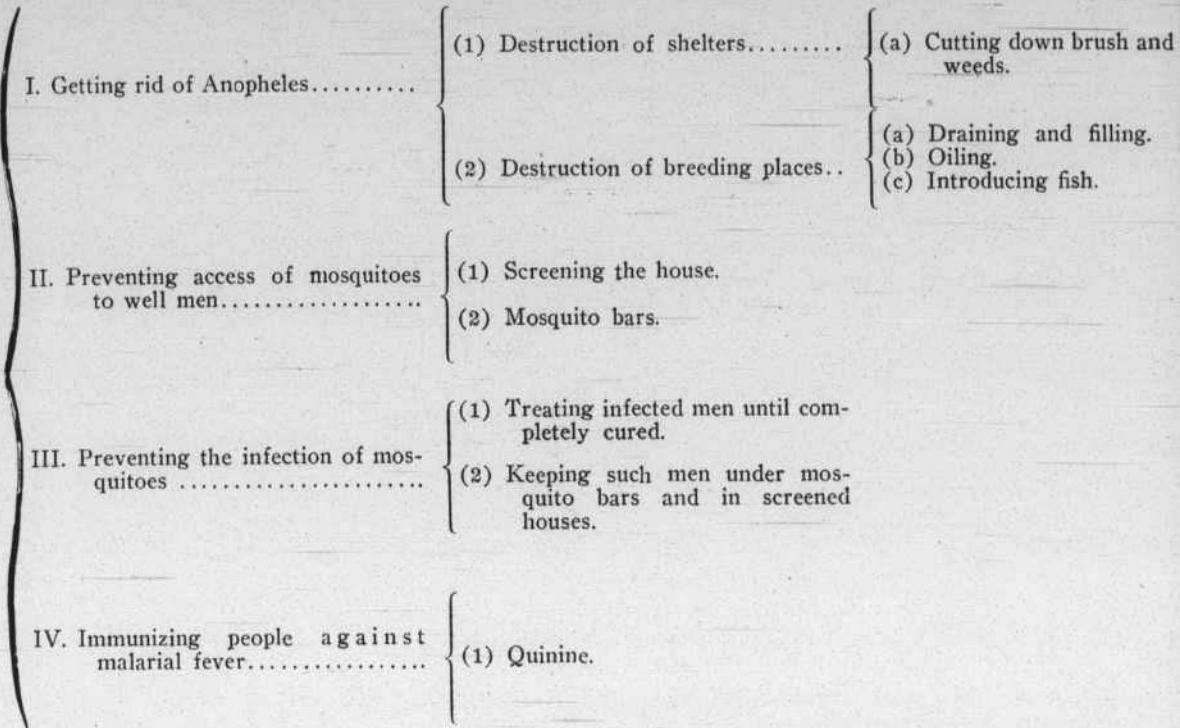
Little Girl—Oh, I don't care much.

Kind Old Lady—But he ate them all up.

Little Girl—Then he'll be sorry, 'cause they wasn't licorice babies. I made 'em out of tar.—*Kansas City Star*.

PREVENTION
OF MALARIA

DIAGRAM SHOWING METHOD AND MEANS OF PREVENTING MALARIA.



(252)

THE DUCK AS A PREVENTIVE AGAINST MALARIA AND YELLOW FEVER.

The duck enters a new field of usefulness; namely, that of destroying mosquito larvæ, and consequently acts as an eradicator of mosquito-carried diseases. Samuel G. Dixon, M. D., LL. D., in the October 3rd number of the Journal of the American Medical Association, describes experiments which he conducted to demonstrate this fact. For this purpose he employed Mallard ducks and his reports testify as to their ability in this field of public health service.

After unsuccessful attempts in which fish were employed to destroy the larvæ, the stream where the experiments were being carried on was divided into two parts. Each portion covered an area of about 1,400 square feet. The conditions created were ideal for mosquito breeding. One pond was protected from the birds and was stocked with gold fish. The other pond was the feeding ground of the fowl for months. Mosquitoes flourished in the protected pond, while the unprotected one was entirely free from the insects.

Ducks were now introduced into the protected area. At first the varied food in the form of tadpoles tempted them; but inside of twenty-four hours they had rid the pond of pupæ; and in forty-eight hours only a few small larvæ remained. The author states that numbers of larvæ must have been drowned, due to the commotion of the water produced by the birds. Doctor Dixon says, "For some years I have been using ducks to keep down mosquitoes in swamps that would have been difficult and expensive to drain, but I never fully appreciated the high degree of efficiency of the duck as a destroyer of mosquito life until the foregoing test was made."

As further proof of his belief and work Doctor Dixon points to the work of Howard, Dyar, and Knab, "Mosquitoes of North and Central America," advancing the theory that ducks destroy mosquito larvæ. Mr. William Lockwood, of Boston, an artist, expresses the same idea; while Mr. McAtee, of the Biological Survey, voices the same opinion.—*The American Journal of Public Health.*

ANOTHER WAY HOG CHOLERA SERUM IS WASTED.

"JACKSONVILLE, FLA., December 23, 1914.

"Mr.,

"DEAR SIR: This office is in receipt of three packages of returned serum shipped to you on October 19th, 23d and 24th, valued at \$21.00. It is expected that when an agent requests serum he orders it for immediate use, and if for reasons beyond his control it is not used, he will return it at once, return charges prepaid, so that it can be supplied to applicants who need it. This serum is now so old that we hesitate to use it on other person's hogs.

"In the future you will be expected to satisfy this office that serum applied for by you is wanted for immediate use.

"As the serum returned can not be replaced in stock, and must be thrown away, the amounts have been charged to the accounts of the

persons you ordered it for, and will be deducted from their quota of free serum for the next twelve months.

"Yours very truly,

"JOSEPH Y. PORTER,
"State Health Officer."

"THE CLEAN-UP AND KEEP-CLEAN HABIT"

Letters such as the following give the kind of encouragement we like to receive; they indicate the awakening interest throughout our State in the most important of all municipal problems — that of *municipal sanitation and community health*:

"OFFICE OF THE MAYOR.

"....., FLORIDA, October 27, 1914.

"State Board of Health, Jacksonville, Fla.

"GENTLEMEN: I am thoroughly in sympathy with you in your work, and am trying to get my people in the clean-up and keep-clean habit.

"I would like plans and specifications of fly-proof privy and any other suggestions as to flies and mosquitoes.

"Thanking you, I am,

"Sincerely,

"....., Mayor."

"JACKSONVILLE, FLA., October 29, 1914.

".....,

"Mayor of,

"DEAR DOCTOR: Your favor of the 27th inst. came duly to hand, and I have taken pleasure in sending you under separate cover a quantity of public health literature, as requested. The plans and specifications on fly-proof privy you will find in publications 99 'Sewage Disposal for Rural Homes' and back part of 118, 'Hockworm and Soil Pollution.'

"I am very much pleased to note your interest in sanitary matters, and have instructed my District Assistant, Dr. W. P. Crigler, residing at Ocala, to call on you when in your vicinity and extend every possible aid toward making your town ideal from a public health standpoint.

"Assuring you that it is a pleasure to be of service, and trusting that you will call upon this office at any and all times when needing advice and assistance in sanitary matters, I am,

"Yours very truly,

"JOSEPH Y. PORTER,
"State Health Officer."

"Cleanliness is next to godliness"—and running a MIGHTY CLOSE SECOND.

STATISTICS.

SMALLPOX.

Reported cases of smallpox in Florida, November, by counties (512 vaccine points distributed):

Jefferson	35
Nassau	2
Total cases smallpox, November.....	37
Total cases smallpox, January 1 to December 1, 1914.....	563

RABIES.

Report of rabies in Florida, November, by counties:

	<i>No. Persons Treated.</i>
Hillsborough	3
Number persons receiving Pasteur treatment, November....	3
Number persons treated January 1 to December 1, 1914....	88

DIPHTHERIA ANTITOXIN.

Indigent patients receiving diphtheria antitoxin through the drugists, paid for by the State Board of Health during November, by counties:

Alachua	1
Duval	10
Escambia	5
Leon	1
Marion	1
Polk	1
Total number indigent patients.....	19

VETERINARY DEPARTMENT.

GLANDERS.

Number cases glanders in Florida, November, diagnosed by veterinarians of State Board of Health:

St. Johns county, at Hastings (dead upon arrival).....	1
Total number cases glanders, January 1 to December 1, 1914.	25

TICK ERADICATION.

Cattle dipping vats reported constructed during November, 1914	0
Total number of cattle dipping vats constructed in Florida to December 1, 1914, reported to the State Board of Health	46

STATISTICS—Continued.

REGULATIONS FOR THE IMPORTATION OF DOMESTIC ANIMALS INTO FLORIDA.

SHIPMENTS OF CERTIFIED LIVE STOCK INTO FLORIDA GIVEN BILLS OF HEALTH AS BEING FREE FROM COMMUNICABLE DISEASE,
NOVEMBER, 1914.

Nov. 1, Carthage, N. Y., to Narcoosee.....	1 bull
Nov. 1, National Stock Yards, Ill., to Madison.....	18 horses, 9 mules
Nov. 3, National Stock Yards, Ill., to Palatka.....	22 horses, 1 mule
Nov. 4, Oklahoma City, Okla., to Lake City.....	25 horses
Nov. 5, Chattanooga, Tenn., to White Springs.....	2 horses, 2 mules
Nov. 6, Atlanta, Ga., to Jacksonville.....	6 horses, 19 mules
Nov. 6, Evansville, Ind., to Parish.....	3 horses, 2 mules
Nov. 6, New Orleans, La., to Wauchula.....	2 horses
Nov. 6, Atlanta, Ga., to Miami.....	4 horses, 20 mules
Nov. 7, New Orleans, La., to Arcadia.....	2 pigs
Nov. 8, District of Columbia to Punta Gorda.....	1 horse
Nov. 8, District of Columbia to Baywood.....	2 horses
Nov. 8, District of Columbia to Baywood.....	1 bull, 1 cow
Nov. 8, Atlanta, Ga., to Live Oak.....	20 horses, 6 mules
Nov. 10, Belmar, N. J., to Orlando.....	1 horse
Nov. 10, Atlanta, Ga., to Lake City.....	2 horses, 14 mules
Nov. 11, Kansas City, Mo., to Fort Myers.....	4 horses, 1 ass
Nov. 12, National Stock Yards, Ill., to Palatka.....	18 horses, 4 mules
Nov. 12, Atlanta, Ga., to Palatka, Fla.....	8 horses, 17 mules
Nov. 13, Atlanta, Ga., to Jacksonville.....	12 horses
Nov. 14, Atlanta, Ga., to West Palm Beach.....	10 mules
Nov. 17, Mooreland, Okla., to Kissimmee.....	2 mules
Nov. 19, Enid, Okla., to Wauchula.....	6 horses
Nov. 19, Columbus, Miss., to Arcadia.....	3 mules
Nov. 20, Atlanta, Ga., to Jacksonville.....	6 horses, 18 mules
Nov. 21, Easton, Ill., to City Point.....	1 horse
Nov. 21, Tamaroa, Ill., to Morriston	4 horses, 5 mules
Nov. 22, Atlanta, Ga., to Newburn	1 horse
Nov. 24, National Stock Yards, Ill., to Live Oak.....	28 mules
Nov. 27, Butler, Mo., to Miami.....	2 horses, 1 cow
Nov. 28, Plainview, Neb., to Bradenton	3 horses
Nov. 28, St. Paul, Neb., to Kissimmee.....	23 horses, 4 asses
Total, 196 horses, 160 mules, 2 cows, 2 bulls, 5 asses, 4 swine.....	369
Total number of shipments.....	32

SHIPMENTS OF CERTIFIED LIVE STOCK FROM FLORIDA, NOVEMBER, 1914.

Nov. 16, Jacksonville to Selma, Ala.....	1 mule
Nov. 26, Tampa to Washington, Ga.....	1 mule
Total	2 mules

STATISTICS—Continued.

HOG CHOLERA SERUM ADMINISTRATION, NOVEMBER, 1914, BY COUNTIES.

<i>County.</i>	<i>C. C. Serum Distributed.</i>	<i>C. C. Virus Distributed.</i>	<i>Estimated Number of Hogs Serum Requested for.</i>	<i>Estimated weight of Hogs to be Treated.</i>
Alachua	11,550 c.c.	100 c.c.	525	32,025 pounds
Bradford	5,400 c.c.	100 c.c.	245	14,945 pounds
Calhoun	750 c.c.		34	2,074 pounds
Citrus	750 c.c.		34	2,074 pounds
Clay	1,700 c.c.		77	4,697 pounds
Columbia	3,750 c.c.		170	10,370 pounds
DeSoto	2,000 c.c.		91	5,551 pounds
Escambia	8,200 c.c.	150 c.c.	377	22,997 pounds
Gadsden	3,000 c.c.		136	8,296 pounds
Hamilton	7,750 c.c.		352	21,472 pounds
Hernando	11,700 c.c.	350 c.c.	532	32,452 pounds
Hillsboro	2,350 c.c.		107	6,527 pounds
Holmes	900 c.c.		41	2,501 pounds
Jackson	1,800 c.c.		82	5,002 pounds
Lafayette	2,650 c.c.		120	7,320 pounds
Levy	2,900 c.c.		132	8,052 pounds
Liberty	1,750 c.c.		79	4,819 pounds
Madison	4,650 c.c.		211	12,871 pounds
Marion	11,400 c.c.*	350 c.c.†	518	31,598 pounds
Osceola	1,150 c.c.		52	3,172 pounds
Polk	2,500 c.c.‡	50 c.c.	114	6,954 pounds
Santa Rosa	1,000 c.c.		45	2,745 pounds
St. Johns	1,500 c.c.	50 c.c.	68	4,148 pounds
Sumter	2,800 c.c.	100 c.c.	122	7,442 pounds
Suwanee	6,500 c.c.		298	18,178 pounds
Taylor	1,000 c.c.		45	2,745 pounds
Totals	101,400 c.c.	1,250 c.c.	4,607 hogs	281,027 pounds

*3,600 c.c. serum sold; †150 c.c. virus sold; ‡1,500 c.c. serum sold.

Total cost of hog cholera serum purchased, January 1 to December 1, 1914.....\$20,618.10

BACTERIOLOGICAL LABORATORIES.

SPECIMEN EXAMINATION.

<i>Specimens.</i>	<i>Jacksonville.</i>	<i>Tampa.</i>	<i>Pensacola.</i>	<i>Miami.</i>	<i>Total.</i>
Animal parasites	108	117	36	...	261
Diphtheria	718	181	116	5	1,020
Gonorrhœa	54	44	32	1	131
Malaria	122	152	40	3	317
Pathological	8	5	1	...	14
Rabies	2	1	...	...	3
Tuberculosis	120	63	32	3	218
Typhoid fever	111	110	27	...	248
Water (for sewage contamination)	9	...	2	...	11
Miscellaneous	30	15	24	2	71
Rat examinations .....	...	516	...	...	516
Totals	1,282	1,204	310	14	2,810
Grand total number specimens examined by laboratories of the State Board of Health during November, 1914.....					2,810

DISTRIBUTION OF DISEASES DIAGNOSED IN NOVEMBER.

REPORT OF CENTRAL LABORATORY, JACKSONVILLE.
—MALARIA—

Town	Diphtheria.	Gonorrhœa.	<i>E. stïïo-autumnal.</i>	Quartan.	Tertian.	Species not Determined.	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Alachua	1	1								3
Alton	1	..	..							1
Apopka .....	..	..	..							1
Arcadia .....	..	1	..							1
Archer .....	..	..	..							1
Bartow .....	..	..	..							1
Bradenton .....	..	..	..							4
Branford .....	..	..	..							1
Brooksville .....	..	..	..							2
Center Hill .....	..	..	..							1
Cocoa .....	..	..	..							2
Daytona .....	..	..	..							2
Eau Gallie .....	..	..	..							1
Ft. Pierce .....	..	1	..							2
Gainesville	4	..	..							5
" release cult. 4	4	..	..							4
Green Cove Springs.	..	2	..							3
Greenville .....	..	..	..							1
Hampton .....	..	..	..							1
Hawthorne	1	..	..							1
Jacksonville	30	20	1			2	9	21	4	87
" release cult. 7	7	..	..							7
South Jacksonville..	1	..	..							1
Jasper	22	..	..			1	..	..	1	24
" release cult. 4	4	..	..							4
Kissimmee .....	..	..	..							1
Largo .....	..	1	..							1
Live Oak .....	..	..	..							1
Mandarin .....	..	..	..							1
Mayo .....	..	..	..							1
Mt. Dora .....	..	..	..							1
New Smyrna	2	..	..							2
O'Brien .....	..	..	..							1
Ocala .....	..	..	..							1
Orlando .....	..	..	..				1	3	..	4
Panama City .....	..	..	..							2
Plant City .....	..	..	..				1	1	..	2
Princeton .....	..	1	..							1
St. Augustine	2	..	..				1	..		3
St. Andrews .....	..	..	..				1	..		1
San Antonio .....	..	..	..							1
Sanford	1	..	..							1
Sarasota .....	..	..	..				1	..		1
Starke .....	..	..	..					1	..	1
Stuart .....	..	..	..					1	..	1
Tallahassee	5	..	..						2	7
" release cult. 4	4	..	..							4
Titusville .....	..	1	..							1
Carried forward	89	28	1	..	..	10	23	33	18	202

DISTRIBUTION OF DISEASES DIAGNOSED IN NOVEMBER — *Continued.*

REPORT OF TAMPA LABORATORY.

Town	<i>Diphtheria.</i>	<i>Gonorrhœa.</i>	<i>Fistulæ- autumnal.</i>	<i>Quartan.</i>	<i>Tertian.</i>	<i>Species not Determined.</i>	<i>Typhoid.</i>	<i>Tuberculosis.</i>	<i>Uncinaria.</i>	Total.
Tampa	15	10						20		65
West Tampa	1							1		4
Wauchula	3									4
Plant City	1									1
Punta Gorda										1
Brooksville										2
Bartow	2									2
Lakeland	1									2
Frostproof										1
Fort Myers										1
St. Petersburg		1								1
Safety Harbor		1								1
Release cultures	40	..								40
Rat leprosy	3	..								3
Total	66	13	1		3	4	15	21	13	136

DISTRIBUTION OF DISEASES DIAGNOSED IN NOVEMBER—*Continued.*

REPORT OF PENSACOLA LABORATORY.

MALARIA —

Town	Diphtheria.	Gonorrhoea	Ectivoro- autumnal.	Quartan.	Tertian.	Species not Determined	Typhoid.	Tuberculosis.	Uncinaria.	Total.
Pensacola	4	13								38
St. Andrews	5	..								1
Century .....	..	..								5
Garniers										2
Marianna	1	..								1
Crestview .....	..	..								1
Bluff Springs	3	..								3
Graceville	1	..								1
DeFuniak Springs...	1	..								1
Flomaton, Fla. ....	..	..								1
Chipley	1	..								1
Bonifay .....	..	..								1
Total	16	13			1			8	13	56

REPORT OF MIAMI LABORATORY.

MALARIA

<i>Town</i>		
Miami .....	| : <i>Diphtheria.</i>	
Total .....	| : <i>Gonorrhœa.</i>	
	| : <i>Hæmorrhoids.</i>	
	| : <i>Quartan.</i>	
	| : <i>Tertian.</i>	
	| : <i>Species not Determined.</i>	
	| : <i>Typhoid.</i>	
	| : <i>Tuberculosis.</i>	
	| : <i>Uncinaria.</i>	
	| : <i>Total.</i>	

Total cases of principal diseases diagnosed by laboratories of the State Board of Health during November:

	Diph- theria.	Gonor- rhea.	Malaria.	Typhoid.	Tuber- culosis.	Uncin- aria.	Total.
Central Laboratory..	70	28	11	24	35	22	190
Tampa Laboratory..	23	13	8	15	21	13	93
Pensacola Laboratory	16	13	1	5	8	13	56
Miami Laboratory..	..	1	..	..	2	..	3
Total for State..	109	55	20	44	66	48	342

VITAL STATISTICS.

ONE YEAR NEARER THE REGISTRATION ERA.

It is fitting that at the close of the year some statement be made of what has been done towards having the reports of births and deaths of the State accurately collected and authoritatively published by the United States Bureau of Census.

Although it was in the August, 1913, *HEALTH NOTES* that the present plan of collecting reports in cities of 2,000 and over, through ordinances was first published, and thereupon actively pushed, it was really not until the early part of 1914 that the system crystalized itself about the Model Ordinance for Registration of Births and Deaths as the needful prototype of the Model State Law, and the practice of states with that law was started to be put into operation.

In August of this year, one year from the published inception of the work, the plan was thrown open to all municipalities of the State and announcement to that effect made in *HEALTH NOTES*.

Last month's issue of that bulletin carried the word that if all went well, the next legislature would be appealed to for a statewide law, the Model Law, that at least the more thickly settled communities should have their births and deaths recorded under the conditions and supervision found in other states to be necessary for accurate and complete statistics, to be followed soon by rural as well as urban registration.

So, step by step, advance has been made in the plans for eventual statewide data sufficiently accurate to be accepted and published by the Census Bureau.

The results have kept pace with the plans, due allowance being made for errors, omissions and delays (which on the part of the public are excused in the spirit of the season, and for which, on the part of this office, indulgence is craved) until now, of the 29 Registration Cities of 2,000 population and over, all but three or four have ordinances with all the essentials to insure accurate and complete registration, and only two or three are remiss in transmitting reports; of the other municipalities this office knows that out of the 50 odd cities and towns under 2,000 and over 500 at least 13 have passed the Model Ordinance and a dozen more are now considering it, while 12 of the smaller communities have passed the ordinance and many others are favoring it.

The records which have and are coming in have been tabulated and published in part and give promise by improvement that before long they will be as accurate and complete as is probable without the

central supervision and control which will be guaranteed under a State statute. They also tend to prove the assertion, often made, of the healthfulness of the State.

However, as was said in the Annual Report of the State Health Officer for 1913, "as the subject is an educational one, at least a year will be required to perfect a system which will be trustworthy, and probably it will not be before 1915 that any exact statement can be made of the birth and death rate of these municipalities. In the meantime there will also be an effort made to awaken a desire in the rural settlements to come into the registration area of the State, and so, by degrees, it is hoped that the earnest expectation of the past twenty-five years may become a realized fact, and Florida, progressive in all other respects as regards health management and conditions, may come into her own in being able to state with facts and figures what has always been believed—but only in a general way asserted—to be the healthiest State in the Union of States."

Truly was it said that the subject is an educational one, and the interest it has aroused throughout the State, rural as well as municipal, not alone in birth and death registration but in all the many health matters with which these are so intimately related and of which they are the basic index, shows how Floridians appreciate the opportunities offered to learn of health conditions.

The State Board of Health solicits the co-operation of everyone and every agency in spreading its Gospel of Good Health and Vital Statistics to prove it, and it especially asks the continued good offices of the press and calls attention to an article reprinted in this issue from the pen of Dr. Evans, Director, Health Department, Chicago Tribune, "Public Health Education and the Press."

Let the slogan be "Florida is Healthful and Vital Statistics will Prove it."

THE DEMAND FOR BIRTH REGISTRATION.

The following letter, from which the names of the writer and her baby, and the day of its birth are omitted, indicates the interest being aroused throughout the state in preserving records of births.

It should stimulate every municipality which has not already done so, to avail itself of the offer to institute registration by immediately passing the Model Ordinance.

Any birth (or death) not already registered, which occurred since the State Board of Health of Florida was organized in 1889 and start-

ed vital statistics in the State, will be gladly recorded, now or then, upon request.

"BROOKSVILLE, FLA., December 21st.

"*The Registrar, Vital Statistics, Jacksonville, Fla.*

"Sir: I cannot find a registrar in Brooksville. Would you kindly let me know if you would register my baby. Name, _____, born August —, 1914.

"Kindly notify me and oblige,

"Yours very sincerely,

"_____,"

VITAL STATISTICS.

(The following article which is an editorial in the Southern Medical Journal for December, 1914, is so apropos at this time that it is quoted in full by the NOTES.)

So much is being said by the press and from the rostrum about public health matters that some of us fail to realize the importance of subdivision of the subject to a thorough understanding thereof.

In a recent most excellent monograph on "Vital Statistics," by Dr. John W. Trask, Assistant Surgeon-General of the United States Public Health Service, he gives a terse list of these subdivisions and their meaning as follows:

"Vital statistics are the statistics of life. Morbidity statistics are the stastistics of disease. Mortality statistics are the statistics of deaths. Birth, death and migration statistics relate to population movement. Statistics of births and immigration show population increment. Statistics of deaths and emigration show population decrement."

Speaking of vital statistics, General Trask defines them as "relating to the life and histories of communities or nations." They are necessarily based on population, the number 1,000 being generally used as a unit of computation, and the births per thousand each year form a basis of comparison. The national census, though indispensable to any general estimate, is open to many errors. To a great degree it depends upon the records of the public health organizations of the several states for its records of births and deaths and they have been hitherto both incorrect and incomplete. This fault seems in a fair way to be corrected. A model law for the registration of births and deaths, so drawn as to meet the approval of the Bureau of the Census, the American Public Health Association and other national organizations, has been presented to the several states for enactment and quite a number

of them have adopted it and made it mandatory. Experience has shown its efficiency and every year other states accept it and come into "the registration area." Sooner or later all the States will be operating under the same law for the registration of births and deaths. This will enable the Bureau of the Census to present to the world a more reliable table of vital statistics than it has ever heretofore been able to compile.

It has happened more than once in this country that a citizen has been unable to secure possession of property that was rightfully his because there were no authoritative records of his birth showing his right of inheritance. On the other hand, aged and unfortunate human wrecks have been denied the barren refuge of the poorhouse because they could not prove their birthright to its shelter. Such incidents could not occur to either had births and deaths been properly recorded at the time and place of their nativity.

General Trask's monograph occupies sixty-nine pages, every one of which is worthy of study. It is followed by an appendix some twenty pages in length, printed in finer type than the body of the pamphlet, and composed mainly of a copy of the so-called "Model Law" for the registration of births and deaths. The whole constitutes "Supplement No. 12 to the Public Health Reports, 1914," and deserves a place in every doctor's library, if he is interested in public health work.

IMPORTANT ANNOUNCEMENT.

NEW BRANCH LABORATORIES OPENED AT TALLAHASSEE AND MIAMI.

The State Board of Health has recently opened bacteriological laboratories at Miami and Tallahassee, which laboratories will be operated as branches of the Central Laboratory at Jacksonville and will be in charge of Assistant Bacteriologists of the State Board of Health.

These laboratories have been established with the view of shortening the mail service to and from points so located as to be inconvenient to the previously established laboratories, thus hastening the receipt of specimens and the reports thereon. All physicians who are so situated that they can obtain better train service to and from these laboratories are urged to make use of them rather than of the Central Laboratory or the other branch laboratories.

MIAMI.

State Board of Health
Laboratory,
Burdine Building,
Dr. Iva C. Youmans in Charge.

TALLAHASSEE.

State Board of Health
Laboratory,
Hirschberg Building,
Dr. W. C. Claxton in Charge.

INDEX TO VOLUME IX

	A
Air, Value of Fresh, "Not Only in Miami".....	162
Announcement—	
New Branch Laboratories Opened at Tallahassee and Miami.....	264
Southern Health Exhibition.....	212
Antitoxin Serum and Vaccine Points "The Breaking of Dawn".....	240
Arterio-Sclerosis "How to Keep Well".....	142
	B
Bacteria, Disease, How They Pass from Person to Person.....	246
Baths	60
Birth Certificate as a Life-Saver, The.....	232
Birth Certificates, File Promptly.....	72
Birth Registration—	
"Almost Lost a Coronet".....	73
Demand for.....	262
Women's Clubs to Check.....	70
Rubonic Plague (See Plague)	
Burial Permits, Florida Funeral Directors Endorse Vital Statistics and,.....	85
Buzzards, The Transmission of Hog Cholera By.....	98
	C
Cancer, Our Knowledge of.....	249
Cesspools, An Inquiry In Regard to.....	111
Chemical Treatment of Water.....	191
Christian Science, "Prayer Recognized as a Therapeutic Measure".....	199
Communicable and Preventable Disease, The Reporting of.....	46
Communicable Diseases—	
"A Confidential Letter".....	97
"Good Health Everywhere Except at Home".....	96
Statistics of.....	86
Community Hygiene.....	95
Conference, Infant Mortality, in November.....	169
Consumption Cure, The Real.....	221
Consumptives, Rules for.....	82
Crippled Children, Florida's.....	26
Cure, Cost of.....	144
	D
Death Rate, The Declining.....	183
Diphtheria, A Few Words About, for the Layman.....	5
Disease—	
Bacteria, How They Pass from Person to Person.....	246
Foot-and-Mouth, Federal Regulations for Preventing Spread of, by Hog Cholera Serum.....	224
Importation in Animals, Precautions Against.....	223
Reporting of Communicable and Preventable.....	46
Reporting of, The Next Step in Life Conservation.....	107
The War and.....	242
Disease, Preventable—	
"Don't Blame It on the Lord".....	221
"War is Hell".....	140
Diseases, Communicable—	
"A Confidential Letter".....	97
"Good Health Everywhere Except at Home".....	96
Statistics of.....	86
Disinfection, The New.....	198
Dogs:	
Hookworms in.....	199
"Please Read and Heed".....	28
Duck as a Preventive Against Malaria and Yellow Fever, The.....	253
	E
Embalmers—	
Licensed, List of, 1914.....	123
Notice of Examination of.....	53, 73
Epidemics, Relation of the School to.....	164
Eugenics—	
"Approval from the Far West.....	46
Improve the Human Stock.....	22
Laws.....	194
Examination, Notice of, Embalmers.....	53, 73
Exhibits, Southern Health Exhibition, Notice of.....	212
	F
Flies	137
Flies and Typhoid.....	23
Foot-and-Mouth Disease, Federal Regulations for Preventing Spread of, by Hog Cholera Serum.....	224

G

Gangrene and Hookworm.....	17
Germs, "What are Germs and What Do They Do?".....	43

H

Headache	170
Health—	
"Breakers of the Law".....	168
Definition of.....	115
Guard, A National.....	217
Human, and the Foot-and-Mouth Disease.....	219
Hog Cholera, The Transmission of, by Buzzards.....	98
Hog Cholera Serum—	
Attorney General's Opinion on Free Distribution of.....	188
"Be a Hog".....	159
Federal Regulations for Preventing Spread of Foot-and-Mouth Disease By.....	224
Improper Use of.....	221
Waste of.....	253
Virus and, Notice Regarding Sale of.....	222
Hogs Versus Humans.....	161
Hookworm—	
Gangrene and.....	17
In Dogs.....	199
Hookworm Disease, The Use of Oil of Chenopodium in its Treatment.....	215
Hygiene, Community.....	95

I

Imhoff Tank, Development of Sedimentation.....	134
Infant Mortality—	
Cause and Remedy.....	86
Conference in November.....	169
The Midwife and.....	48

L

Law, Model State Vital Statistics, for Florida Municipalities.....	231
Laws, Eugenic.....	194
Leprosy, The Non-Identity of Modern and Biblical.....	198

M

Malaria—	
Diagram Showing Method and Means of Preventing.....	252
In Florida.....	117
Why have.....	251
Yellow Fever and, The Duck as a Preventive Against.....	253
Measles, A Few Words About, for the Layman.....	25
Medical Practice, The Social Status of.....	243
Medicine, The Christmas Spirit in.....	239
Midwife—	
Education of the.....	69
Infant Mortality and the.....	48
"Legalizing Crime in Florida".....	9
Morbidity Reports in Ohio.....	234

N

National Health Guard, A.....	217
New Year's Greetings, 1914.....	2

O

Ordinance—	
Model, for Registration of Births and Deaths.....	123
Model Vital Statistics, Progress of.....	233

P

Pellagra—	
Brief Comments on Present Knowledge.....	11
The Later Theories Concerning.....	195
Plague—	
A Lesson From.....	110
Introduction of, by Means of Freight Shipments.....	136
Notes on.....	110
Operations in New Orleans.....	172
Status in Havana.....	94

Privy—		
"Fly-Proof, "Do It Now".....	169	
"Just Deserts".....	219	
Public Health Administration—		
"Allies and Promoters".....	158	
"Dollars Versus Deaths".....	247	
Public Health Education and the Press.....	248	
Public Health Work, Woman's Part in, As Demonstrated in New York.....	145	
Publications, State Board of Health, List of for Free Distribution.....	182, 214, 238	
Pure Water and Health.....	63	

R

Rabies—		
"Please Read and Heed".....	28	
Symptoms of, Its Management.....	78	

S

Sanitation—		
"A Sanitary Sermon".....	140	
"A Tale of Two Contractors".....	143	
"Dirty People and Dirty Towns".....	39	
Education	187	
Political Economy and	190	
"Some Hints in Sanitary Precepts".....	38	
"The Clean-Up and Keep-Clean Habit".....	254	
Scarlet Fever, A Few Words About, for the Layman.....	3	
School, Relation of, to Epidemics.....	164	
Screening, "A Good Investment".....	111	
Serum, Hog Cholera (See Hog Cholera Serum)		
Smallpox—		
"A Comparison".....	78	
Indigent Cases, Notice to Physicians.....	83	
Vaccination and, A Few Words About, for the Layman.....	6	
Social Status of Medical Practice, The.....	243	
Specimens, Bacteriological—		
"Physicians of the State Will Please Read Carefully and Heed".....	113	
"To Our Medical Friends".....	184	
Southern Health Exhibition, Notice of.....	212	
Statistics	13, 29, 54, 73, 89, 100, 119, 147, 173, 202, 226, 255	

T

Tuberculosis—		
Home Treatment of.....	189	
Its Prevention and Cure.....	58	
Rules for Consumptives.....	82	
"The Fight for Life".....	41	
"The Greatest Reward".....	217	
Typhoid Fever—		
Disappears in the Army.....	81	
Epidemiology	138	
Flies and.....	23	
Florida and.....	80	

V

Vaccination, Smallpox—		
"A Reasonable Demand".....	162	
Combatting	116	
"Convinced".....	163	
"Good for Massachusetts".....	194	
Saves Baby.....	146	
Smallpox and, A Few Words About, for the Layman.....	6	
Vaccination, Typhoid—		
"A Little Child Shall Lead Them".....	147	
"But Why Not Now".....	113	
Vaccine Points and Antitoxin Serum, "The Breaking of Dawn".....	240	
Vital Statistics—		
All Florida Cities Can Have.....	151	
"Almost Lost a Coronet".....	73	
Another Value of	179	
"Birth Certificate as a Life-Saver".....	232	
Birth of, in South Carolina.....	52	
"Birth Registration Necessary".....	36	
"Costly Economy".....	88	
Definition of	263	
"Demand for Birth Registration".....	262	
Discussion of the Reasons for and the Value of the Registration of.....	50	
Discussion of What They Are and Their Uses in Public Health Administration.....	125	
"File Your Birth Certificate Promptly".....	72	
Florida Federation of Woman's Clubs and.....	87	

"Florida Funeral Directors Endorse Vital Statistics and Burial Permits".....	85
"Florida Municipalities and the Model Ordinance".....	177
"Florida Registration Cities".....	33
In Georgia.....	153
In Small Cities.....	124
"Infant Mortality".....	86
"Importance of Birth and Death Registration to People as a Whole".....	210
"Improvement in the Census Reports".....	153
"Licensed Embalmers".....	123
Model State Law, for Florida Municipalities.....	231
"Morbidity Reports in Ohio".....	234
Nation's Big Need.....	127
Notice to Registrars, Monthly Reports.....	19
"One Year Nearer the Registration Era".....	261
Payment for Reports.....	156
Progress of Model Ordinance for.....	233
"Register all Births and Deaths in Your Family".....	53
Reports, Delayed and Incomplete.....	155
Requisites to Make Records Valuable.....	20
"St. Petersburg's Mortality".....	32
Standard Certificates.....	34
"Statistics of Transmissible Diseases".....	86
Tabulation of Births and Deaths, First Half Year, 1914.....	207
Tabulation of Births and Deaths, First Quarter, 1914.....	104
"The Bookkeeping of Life and Death".....	18
"The Health of a State".....	132
"The Midwife".....	69
"The Midwife and Infant Mortality".....	48
"The Model Ordinance for Registration of Births and Deaths".....	123
"The Power of the Press".....	69
"The Reporting of Communicable and Preventable Disease".....	46
"The Reporting of Disease, the Next Step in Life Conservation".....	107
"Undesirable Terms".....	35
Value of.....	34
"Virginia's Roll of Life and Death".....	85
"Women's Clubs to Check Birth Registration".....	70

W

Water, Pure, and Health.....	63
Water, Chemical Treatment of.....	191

Y

Yellow Fever and Malaria, The Duck as a Preventive Against.....	253
---	-----

ILLUSTRATIONS

"The Barn that Jack Built".....	180
"Dinner's Ready".....	236